

Connected by Technology, Empathetically Disconnected: A Correlational study into Phubbing Behaviour in Ireland

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Date Submitted: 29th April 2019

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Word Count: 5,928

*Thesis submitted as a requirement for the degree of MSc in
Cyberpsychology, Dun Laoghaire Institute of Art, Design and
Technology, 2019*

Declaration



This thesis is submitted to the Department of Technology and Psychology as a requirement for the degree of MSc in Cyberpsychology at the Institute of Art Design and Technology (IADT), Dublin. I declare that this thesis is all my own work and that all sources have been fully acknowledged.

Signed: _____

Date: _____

Word count: 5,928

Acknowledgements

I would like to thank my supervisor, Liam Challenor, for his advice and support during this research. He was a wonderful source of information and his continuous guidance and reassurance helped tremendously throughout the research, data collection and analysis of this study. Thank you so much!

I also would like to thank my family for their love, understanding, and assistance during this research. Without their continued support and encouragement, this thesis would not have been possible. A very special thank you to Dave. I really appreciated every meal you made and reminded me to eat over the past two years and for going for hikes with me when I needed a break from the books! To the Cramps, thank you for always being there if I needed a reminder that the end was in sight and with it - buckets of social-butterflying!

Thank you to my colleagues for their encouragement across the canteen tables and for their continued support and interest in this thesis.

Also to Jessie – without your gentle nudges (and tail wagging!) to get outside and into the fresh air I would have been glued to my computer from beginning to end.

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Title

Connected by Technology, Empathetically Disconnected: A Correlational study into Phubbing Behaviour in Ireland.

Abstract

Smartphones have transformed how we communicate ([Leggett & Rossouw, 2014](#)), however, our dependence on smartphones has become intrusive for many people ([Ofcom, 2018](#)). Phubbing (phone snubbing) has become a “normal” activity in society and has gained both academic and media attention ([Roberts & David, 2016](#); [Chotpitayasunondh & Douglas, 2016](#); [Ducharme, 2018](#); [Whiteman, 2018](#)). Researchers fear smartphone use negatively impacts our relationship with other people, by cutting-off our face-to-face channels of communication and ability to empathise with others ([Borba, 2016](#); [Roberts & David, 2016](#); [Turkle, 2017](#)). The present study is the first to investigate the relationship between empathy and phubbing, and provides insight into Irish phubbing behaviour. 82 participants completed a combination of quantitative scales (The Generic Scale of Phubbing, The Generic Scale of Being Phubbed, the Single Item Trait Empathy Scale) and a number of qualitative items to provide their opinions towards phubbing. Results suggest age, gender, and self-isolation correlated significantly with empathy. Participants felt individuals phubbed as they feared being alone and were unaware of others’ feelings. Although individuals considered phubbing unacceptable, participants felt it had become normal in Irish society.

Key words: phubbing; empathy; isolation; technology; smartphones

Thumbs are stronger,
attention shorter,
temptation everywhere:

We can always be,
mentally, digitally,
someplace other than
where we are.

T I M E

(Time, 2012)

Chapter 1

Literature Review

Introduction

We are ceaselessly connected to each other through our smartphones (Geser, 2006; Nazir & Piskin, 2016; Powers, 2010). Smartphones have transformed communication (Leggett & Rossouw, 2014), however, our dependence on smartphones has become intrusive for many people (Ofcom, 2018). Phubbing (phone snubbing) has gained academic and media attention (Roberts & David, 2016; Chotpitayasunondh & Douglas, 2016; Ducharme, 2018; Whiteman, 2018). Turkle (2016) fears smartphones are responsible for the demise in empathy. As smartphones become integrated into our daily lives, we often forget the real-world around us (Rainie & Wellman, 2012). Researchers fear smartphone use negatively impacts our relationships with other people, by cutting-off our face-to-face channels of communication and ability to empathise with others (Borba, 2016; Roberts & David, 2016; Turkle, 2012).



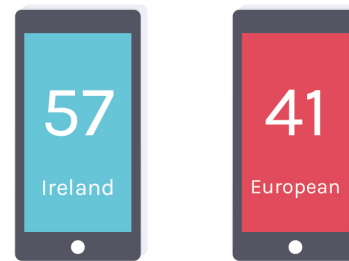
Smartphone Use

Smartphone use has increased in recent years and completely changed communication (Chotpitayasunondh and Douglas, 2018; Geser, 2006). Ofcom (2018) found 15% felt constantly at work via smartphones and over 50% felt smartphones interrupted their conversations. 93% of Irish people have access to smartphones, higher than the UK (Ofcom, 2018) or the European average (Deloitte, 2018) (Figure 1). 56% of Irish people feel they excessively use phones, compared to 39% in the UK (Deloitte, 2018).

Findings from Office of Communications (UK) Study



People check their smartphones, on average, every **12 minutes**



Today, the average Irish person checks their phone **57** times a day*, compared to **41** for the average European**



40% of individuals check their phone within 5 minutes of waking each morning and in the 5 minutes before turning off their light at the end of the day

*(Ofcom, 2018)

** (Deloitte, 2018)

Figure 1. Findings from the Ofcom study (2018)

Since the introduction of smartphones, we have witnessed the emergence of a new social behaviour: phubbing. While technology has improved communication, people have become more disconnected, losing the art of conversation and human interaction (Bhatia, 2016; Roberts & David, 2016). Ironically, technology designed to connect, has isolated individuals from those they wish to empathise and communicate with (Primack et al., 2017; Turkle, 2012).



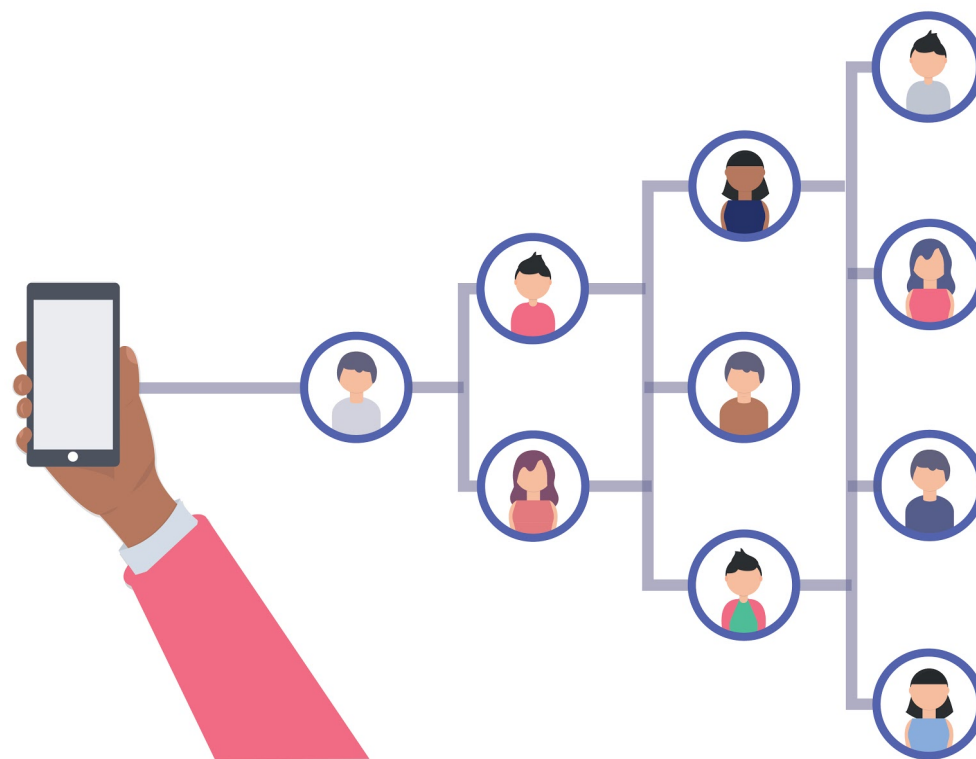
Figure 2. Four subscales of empathy (Davis, 1983)

Empathy

Empathy is a key part of being human (Taylor, 2012). Although a universal definition for empathy does not exist (Neumann et al., 2015), for this study, empathy is defined as individuals' responses to the experiences of another (Davis, 1983). Davis (1983) identified four subscales of empathy (Figure 2). Empathy involves understanding another person's circumstances (Hoffman, 2007; Wiseman, 1996) and is vital in the development of relationships (Riess, 2013). Cameron et al. (2019) found that people often avoid empathising as it is cognitively demanding. As technology becomes integral to our lives, Saarikivi (2016) believes empathising will become the most important human skill.

Phubbing

Phubbing occurs when individuals use their phone in the presence of another, often paying more attention to their smartphone (Karadağ et al., 2016; Roberts & David, 2017). It is a portmanteau that blends the phonology and meaning of the words 'phone' and 'snubbing' (Chotpitayasunondh & Douglas, 2016). Today, many Irish people struggle to ignore their smartphones and focus on those around them. Deloitte (2016) found 87% of Irish 18-24 year-olds ubiquitously use smartphones. Messenger (2017) said 82% of millennials phub. Turkle (2016) believes, in the Age of the Algorithm, conversations have become transactional and people have lost the art of empathy.



Empathy & Phubbing

Smartphones reduce situational awareness and increase individuals' likelihood to perform unsafe activities (e.g. texting while driving) (Neider et al., 2010; Thornton, Faires, Robbins & Rollins, 2014). Konrath, O'Brien, & Hsing (2011) found young adults' empathy levels had decreased by 40% in the past 30 years which correlated with the increased use of personal technology (Konrath, 2012, p9). Konrath (2012) found as people become

more self-focused they become less focused on other people. Borba's (2016) research focuses on the concept: self-absorption kills empathy. She believes you cannot learn empathy facing screens as it involves being tuned-in and aware of other people. Empathy is a skill learned by interacting with people face-to-face (Borba, 2016; Saperstein, 2015). Konrath (2012) found "social connection is good for individuals" (p4). Turkle (2012) fears as we become more connected online, our ability to empathise weakens. Brené Brown believes empathy fuels connection (RSA, 2013). Without empathy, human connection and existence will change forever.

Presence of a smartphone

Przybylski and Weinstein (2013) found the presence of smartphones can unconsciously influence participants' behaviours and discourage meaningful conversations taking place. They found phone presence "inhibited the development of interpersonal closeness and trust, and reduced the extent individuals felt empathy and understanding" (Przybylski & Weinstein, 2013, p244).

Smartphones, face-down, can distract people, reducing their cognitive ability (Ward et al., 2017). Turkle (2016) suggests those who use social media most struggle when interpreting emotions, including their own.

Face-to-face conversation increases self-esteem and individuals' ability to deal with others (Turkle, 2016). Smartphones can facilitate or disrupt relationship formation and intimacy (Przybylski & Weinstein, 2013).

Smartphones cause individuals to become "absent present", where they are physically in the same room as another, but smartphones prevent them from becoming fully present (Kleinman, 2006).

A decline in eye contact, due to smartphone use, can inhibit meaningful bonds being formed (Nakamura, 2015; Shellenbarger, 2013). Eye contact is key in developing empathetic relationships (Riess, 2013). When individuals are distracted by their phone, the opportunity for communication is lost and empathy cannot transpire (Saarikivi, 2016). To be present is to be free of internal and external distractions (Leggett & Rossouw, 2014).

Where does phubbing happen?

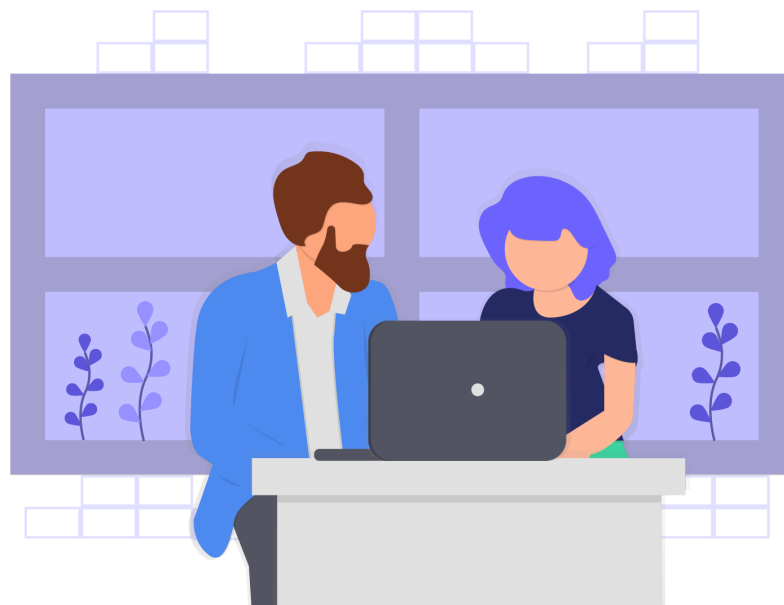
We use smartphones on public transport, socialising, watching television, (Deloitte, 2016), even at funerals (Turkle, 2012)! Three of the main areas where phubbing occurs are between romantic partners, workplaces and educational settings. Elon Musk feels our phone has become an extension of our hands which many people struggle to live without (Rogan, 2018).



Personal Relationships

Smartphones allow individuals to expand their social circles and maintain relationships with friends and family (Krasnova et al., 2016; Roberts & David, 2016; Wei & Lo, 2006). Smartphones remind individuals of the broader social network available and may encourage them to withdraw from conversation offline to communicate with people online (Thornton et al., 2014; Geser, 2004; Turkle, 2012; Ling, 2004).

Phubbing indirectly impacts depression, relationships, and satisfaction in romantic relationships (Roberts & David, 2016). This suggests phubbees (people who are phubbed) may turn to social media for social connection when they feel excluded. Social exclusion can cause feelings of depression and lower well-being (David & Roberts, 2017). Our most fundamental human need is the desire for social relationships (Lee & Shrum, 2012).



Workplaces

In workplaces, bphubbing (boss phubbing) undermines the relationship between employees and supervisors, critical for engagement and trust (Roberts & David, 2017), which can negatively impact meaningfulness, availability, and safety in the workplace (Roberts & David, 2017).

Smartphones negatively impact the productivity in workplaces as individuals struggle to regain concentration after using their phone (Altmann, Trafton, & Hambrick, 2014; Spira & Feintuch, 2005).

Educational Setting

Smartphones provide educational opportunities in primary and secondary school classrooms (Ismail, Azizan & Azman, 2013). Many college students experience “distracted learning” when using smartphones during courses (Froese et al., 2012; Smith, Isaak, Senette, & Abadie, 2011), particularly in

relation to social media use (Harman & Sato, 2011; Walsh, Fielder, Carey, & Carey, 2013).

Ugar and Koc (2015) defined academic phubbing as the preoccupation of students with their smartphone during classes. They discovered that 100% of university students own smartphones and 95% phubbed in class (Ugar & Koc, 2015), but acknowledged it is distracting for other students (Tindell & Bohlander, 2010). Although students believed they could multi-task, phone use impacted their ability to concentrate and understand information (McCoy, 2013; Wei, Wang, & Klausner, 2012) which resulted in lower grades (Clayson & Haley, 2012).



Rationale

While researchers have explored the area of nomophobia (addiction to your phone) (Mendoza et al., 2018; Sharma et al., 2017), phubbing remains under-researched and further studies are needed (Chotpitayasunondh & Douglas, 2018). The studies in the Literature Review touched upon different elements of empathy, however research into how individuals' empathy relates to phubbing has not been explored. This study examines the

influence of empathy levels on individuals' phubbing behaviour. Previous studies have been conducted in India (Davey et al., 2018), Thailand, (Thomas, 2016), Turkey (Karadag et al., 2016) and the United States (Roberts & David, 2017; Roberts & David, 2016). There is a dearth of research in the English language into phubbing in Europe (García, 2017; Кузнецова & Безуглова, 2017).

Chotpitayasunondh and Douglas (2016) suggested research is needed to understand the normality of phubbing experiences. This study examines the motivations of phubbers from the point of view of phubbees and the normality of the behaviour.

Research Questions

1. Do empathy levels impact individuals' likelihood to phub?
2. Do empathy levels impact individuals' likelihood to be phubbed by another?
3. What do Irish people think of phubbing?
4. Does society think phubbing is a normative and accepted behaviour?
5. Is there a relationship between age, gender and phubbing behaviour?

Hypotheses

1. Empathy: individuals who scores low on the SITES are more likely to phub.
2. Phubbing: Individuals who scores high on the Phubbing scales are more likely to have low empathy levels.
3. Millennial and Gen Z participants will be more accepting of phubbing.



Chapter 2

Methodology

Introduction

This chapter discusses the methodology: the research design, the pilot study and its findings, the participants, procedure, and materials used in the main study, and ethical considerations analysed during the research.

Design

This research employed a non-experimental, correlational research design, using a combination of quantitative scales (The Generic Scale of Phubbing, The Generic Scale of Being Phubbed, the Single Item Trait Empathy Scale) and a number of qualitative items ([Creswell, 2013](#); [Schoonenboom & Johnson, 2017](#)) collected via online questionnaire.

Online Questionnaire

Online questionnaires are cheaper ([Beebe et al., 1997](#); [Rosenfeld, Booth-Kewley, & Edwards, 1993](#)) and reduce time and workload compared to paper questionnaires ([Trukeschitz & Blüher, 2018](#)). Research suggests both online and paper questionnaires receive similar response rates and data-quality ([Newell et al., 2015](#); [Shah et al., 2016](#)).

Advantages

Online questionnaires allow data to be analysed in real-time ([Fanning and McAuley 2014](#)). Online questionnaires reduce socially desirable responses from participants ([Zhang et al, 2017](#)) as participants complete it in their

own time and space (Brosnan, Grün, & Dolnicar, 2017) reducing the Hawthorne Effect (Lefever et al., 2007).

Disadvantages

One of the concerns when designing the questionnaire was completion time. Online questionnaires should take between 10–30 minutes to complete (Ganassali, 2008; Revilla & Ocha, 2017). Participants might begin the questionnaire and after a time, forget to complete it (Lefever et al., 2007). As a result the researcher used the SITES empathy scale to increase the response rate.

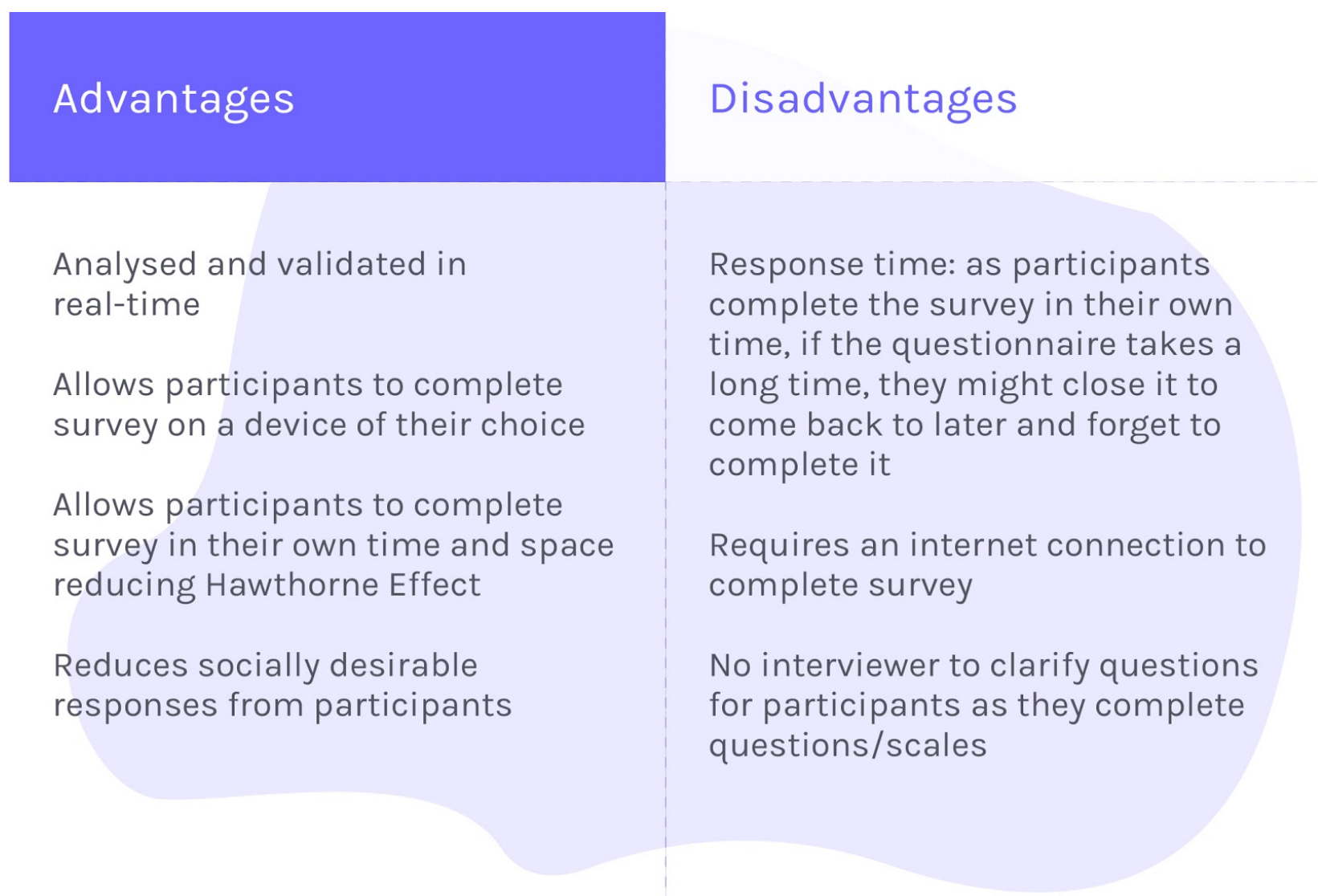


Figure 3. Advantages and disadvantages of Online Questionnaire

Materials

Information Sheet (Appendix A)

The Information sheet informed participants of the purpose of the study, tasks they would complete, benefits and potential disadvantages and what would be done with data. All data collected was stored securely and confidentially. Participants were encouraged to ask the researcher any questions prior to beginning the study.

Consent Form (Appendix B)

Participants were invited to complete the Consent Form if they agreed to participate. It included the main points of the Information Sheet as complete statements. Sample statements included:

1. I understand my participation is voluntary and that I am free to withdraw any time.
2. I am 18 years and over.

Explainer video (Appendix C)

As phubbing is a term not commonly recognised in mainstream society, an explainer video was created to explain what phubbing is, how it happens, and where it often occurs (Figure 3). Examples were included so participants could clearly understand the concept of phubbing.



Figure 4. Explainer Video

Demographics (Appendix D)

Participants were asked to provide their: age, gender, smartphone ownership, and daily smartphone use.

Qualitative Items (Appendix E)

Participants were invited to provide their thoughts and feelings in relation to phubbing. Sample questions included:

1. Do you think phubbing is appropriate?
2. Do you think people are aware of phubbing behaviour?

Phubbing scales

Although there have been a number of scales created researching phubbing behaviour, there has been “little consideration of the scale development process and the psychometric properties of these instruments beyond nothing internal consistency and factor loadings” (Chotpitayasunondh & Douglas, 2018, p4). The Karadag et al. (2016) scale was developed to test university students in Turkey, however information on scale adaptation for other languages is not provided. Many existing scales were developed to answer specific research questions and did not focus on the generalizability of the findings (Chotpitayasunondh & Douglas, 2018).

Generic Scale of Phubbing (GSP) (Appendix F)

The GSP ($\alpha = .93$) was created by Chotpitayasunondh and Douglas (2018). Six studies were used to expand the research and create the scale. The scale measures “the unique behavior of phubbing in social interaction” (Chotpitayasunondh & Douglas, 2018, p36). Participants completed the 4-factor 15-item scale to measure their phubbing. The scale is measured from (1 = Never, 7 = Always) on a 7-point Likert scale. The GSP scale identified four factors (Chotpitayasunondh & Douglas, 2018):

1. Nomophobia (NP) – reflected fear of detachment from one’s phone ($\alpha = .84$).
2. Interpersonal Conflict (IC) – perceived conflict between oneself and others ($\alpha = .87$).
3. Self-isolation (SI) – related to using one’s phone to escape from social activities as a way of isolation ($\alpha = .83$).
4. Problem Acknowledgement (PA) – related to participants acknowledging whether they have a phubbing problem ($\alpha = .82$).

Statements included:

1. I get irritated if others ask me to get off my phone and talk to them.
2. I feel good when I stop focusing on others and pay attention to my phone instead.

Generic Scale of Being Phubbed (GSBP) (Appendix G)

The GSBP ($\alpha = .96$) was created by Chotpitayasunondh and Douglas (2018) to measure participants phubbing experiences following their analyses of six studies: 1a & 2a) Item development and EFA of the GSP and GSBP; 1b and Study 2b) CFA and validity evaluations of the GSP and GSBP; 1c and Study 2c) test-retest reliabilities and discriminant validities of the GSP and GSBP (Chotpitayasunondh & Douglas, 2018).

Participants were asked to complete the 3-factor 22-item GSBP Scale. The scale is measured from (1 = *Never*, 7 = *Always*) on a 7-point Likert scale. The GSBP scale identified three factors (Chotpitayasunondh & Douglas, 2018):

1. Perceived Norms (PN) – reflected descriptions of what others do with their phones ($\alpha = .92$).
2. Feeling Ignored (FI) – concerning feeling ignored by others phone use ($\alpha = .94$).
3. Interpersonal Conflict (IC) - concerning perceived conflict between oneself and others due to mobile phone use ($\alpha = .90$).

Statements included:

1. Others pay attention to their phones rather than focusing on me.
2. Others seem like they are “in their own worlds” using their phones.

Single Item Trait Empathy Scale (SITES) (Appendix H)

Following the analysis of several empathy measurements (the Interpersonal Reactivity Index, the Big Five Personality Traits, participants’

self-reported environmental behaviors, participants' emotion recognition and associations with pro-social behaviour), the SITES was created to measure the "extent to which people tend to vary in their empathic responses to others across situations" (Konrath, Meier & Bushman, 2018,p1). The researchers tested the scale's test-retest reliability. When compared to the IRI, the SITES scored 9.3 Flesch-Kincaid grade level, compared to 7.9 for the IRI (Davis, 1983).

"In situations when time or question quantity is constrained" (Konrath et al., 2018,p1), the SITES takes seconds to complete compared to other empathy scales , such as the IRI which consists of 28 items.

Participants were asked to complete the 1-item SITES to measure their trait level of empathy. The scale is measured from 1 (*not very true of me*) to 5 (*very true of me*) on a 5-point Likert scale.

"empathetic"

As "phubbing" is a term many people do not recognise, it was important that the wording used throughout the remainder of the questionnaire was simple and clear. The SITES uses the term "empathetic". Konrath et al. (2018) found participants understood the word "empathetic" as "empathy" is widely used in mainstream society.

Pilot Study (Appendix W)

A pilot study was conducted to gain participants' feedback on the structure of the study, calculate completion time, and to discover issues or confusion participants might experience (Saunders et al., 2007). The pilot was also conducted to test the Google Forms and website integration.

Ten participants completed the pilot survey using the researcher's website (Fink, 2003). Following the pilot study, the researcher incorporated all

elements of the questionnaire within Google Forms to reduce participants' cognitive load (Trukeschitz & Blüher, 2018).

Main Study

Participants

82 participants (31 males and 51 females) aged 18 to 64 completed the questionnaire. The inclusion criteria for the study was smartphone ownership. 100% of participants owned smartphones so none were excluded. 60% of participants spend 3+ hours on their mobile daily (Figure 10).

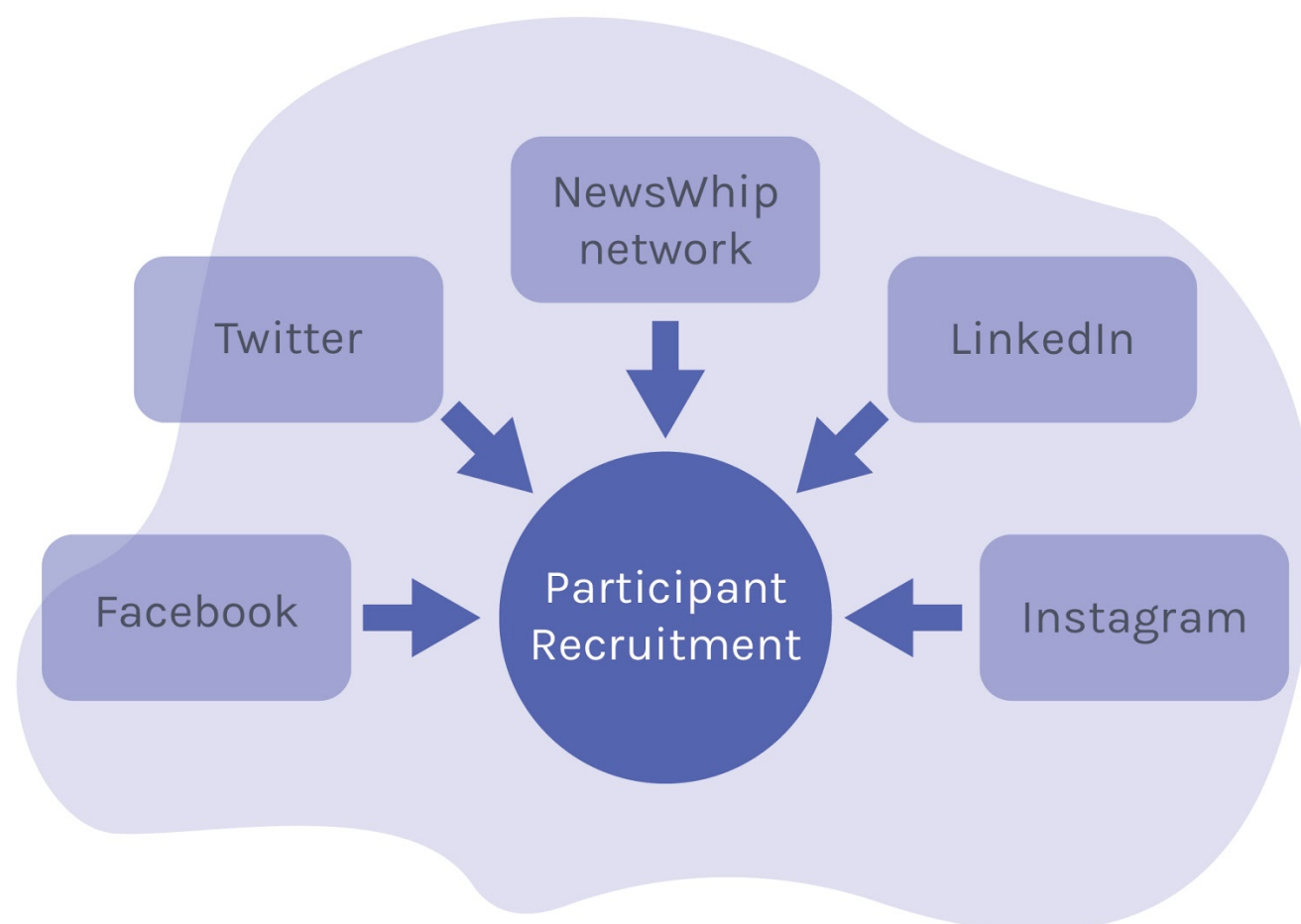


Figure 5. Participant Recruitment

Participant recruitment

Convenience sampling was employed to recruit participants. The researcher contacted potential participants across social media and

through colleagues (Figure 5). Participants were encouraged to refer the study to their social network through snowball sampling.

Procedure (Figure 6)

Participants completed the online survey over a 7–23 minute period. Participants were invited to read the information sheet and provide consent before beginning. Participants watched an explainer video to understand what phubbing is, provided their demographics, answered qualitative questions, and completed the GSP, GBSP and SITES scales. To conclude, participants were thanked and debriefed on their involvement.

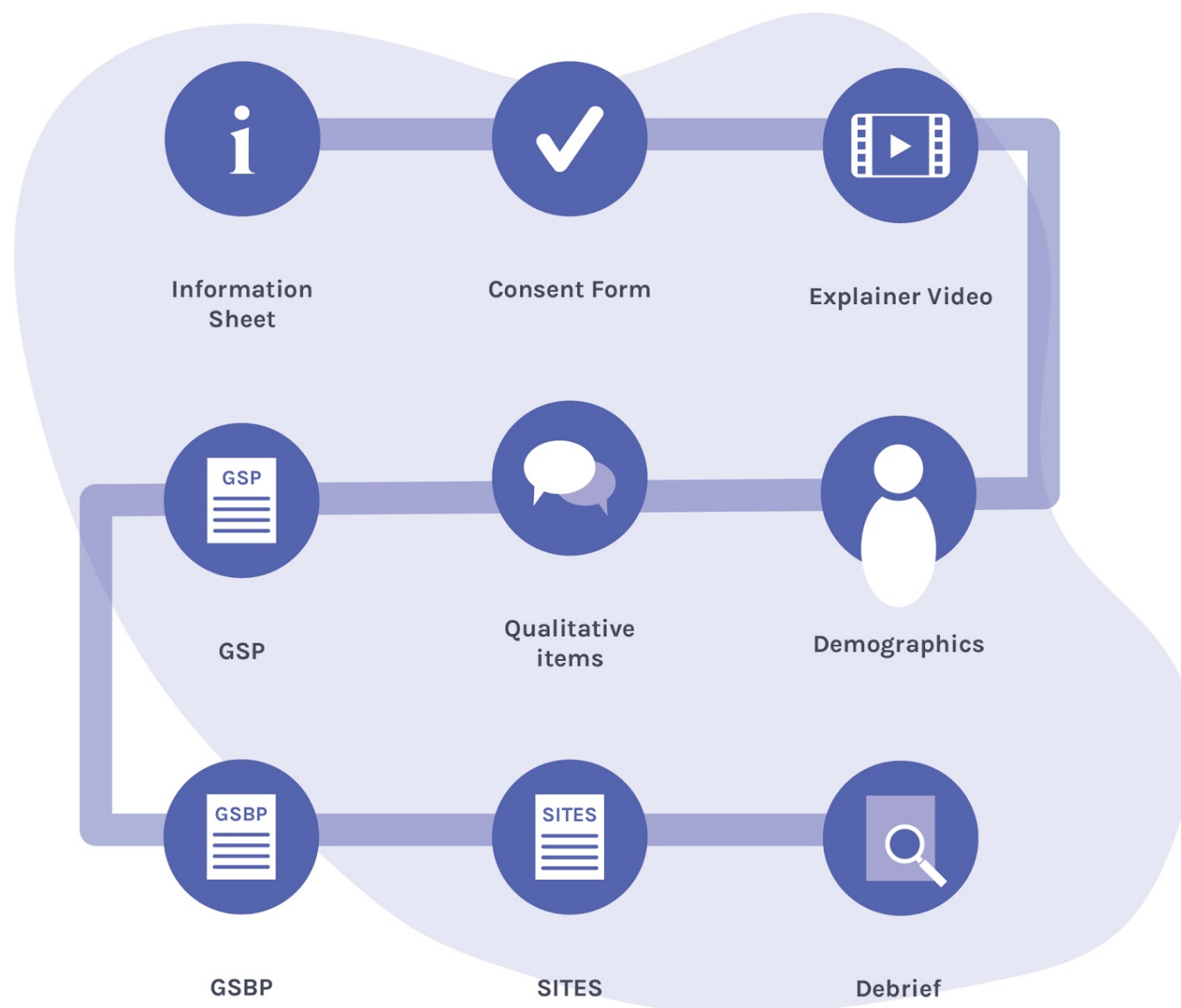


Figure 6. Diagram of procedure

Ethics

Ethical approval was sought and granted by the Department of Technology and Psychology Ethics Committee (DTPEC) ([Appendix U](#)). The researcher completed Ethics Form A ([Appendix V](#)).

Participant Vulnerability

Participants were 18 years and older. The information sheet informed participants of the purpose of the study, tasks involved, benefits and potential disadvantages of taking part, and all data would be stored securely and anonymously ([BPS, 2014](#)). Participants were free to withdraw anytime, without providing a reason ([BPS, 2014](#)). They were encouraged to ask the researcher any questions prior to beginning the study. Participants completed the Consent Form ([Appendix B](#)) to confirm they were happy to participate.

Debrief

The debrief thanked participants and explained the research aims to assure them that their time was not wasted ([Blanck et al., 1992](#)).

Data storage

All data collected was stored securely on a password-protected Macbook. The researcher will retain data for up to 5 years for publication purposes before being deleted ([BPS, 2009](#)).

Data Analysis

Following data collection, quantitative data was analysed using SPSS v.26 to identify the correlations between each of the scales (GSP, GSBP and SITES) and demographics. Qualitative data was examined to understand participants' perspective towards phubbing ([Braun & Clarke, 2006](#)).

Chapter 3

Results

Introduction

This chapter outlines the data collection and statistical analysis used. This study examined if age, gender, smartphone use, previous phubbing experiences, and empathy levels predict phubbing. The researcher examined all quantitative data using SPSS.

Participants

Participants (N = 82) were recruited and completed the questionnaire online.

Age

Participants ranged in age from 18 to 64. No participants were in the 65+ age bracket ([Figure 7](#)). The most frequently reported age-range was 25-34.

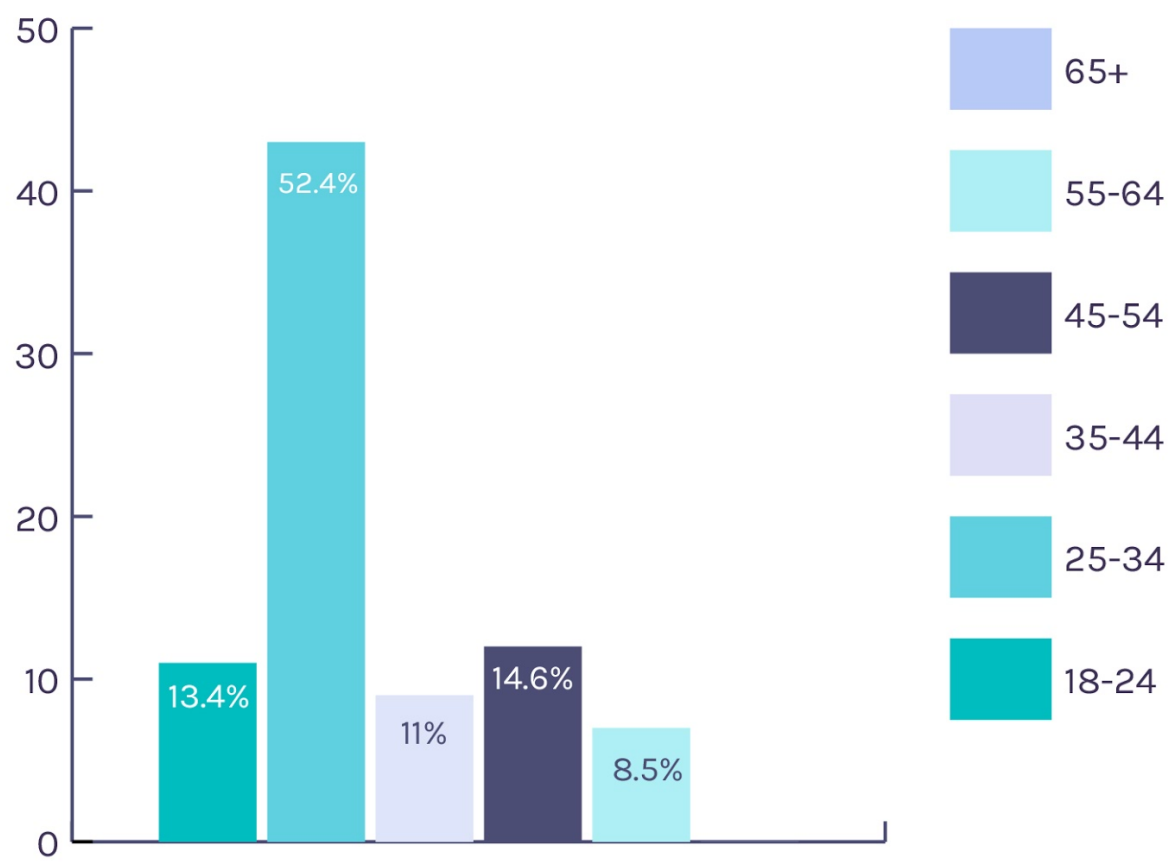


Figure 7. Age ranges of participants

Gender

82 participants completed the study (31 = male; 51 = female) (Figure 8).

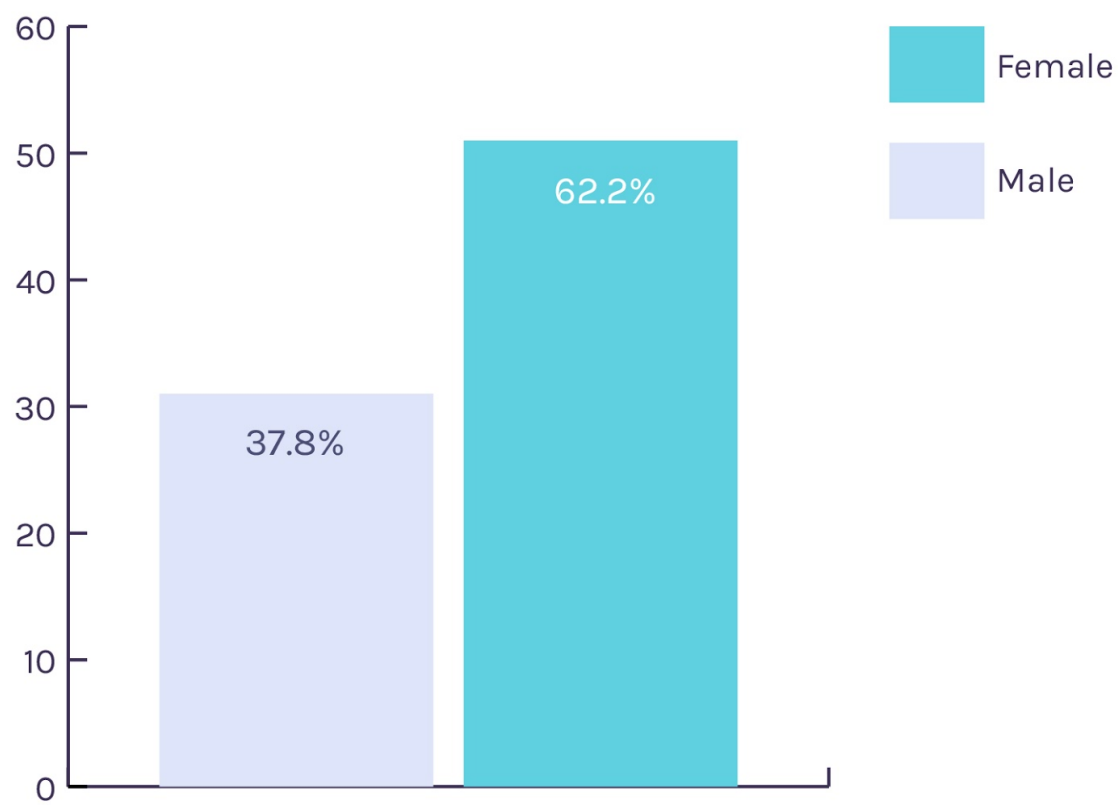


Figure 8. Gender of participants

Smartphone Ownership

100% of participants owned smartphones; no participants were excluded (Figure 9).

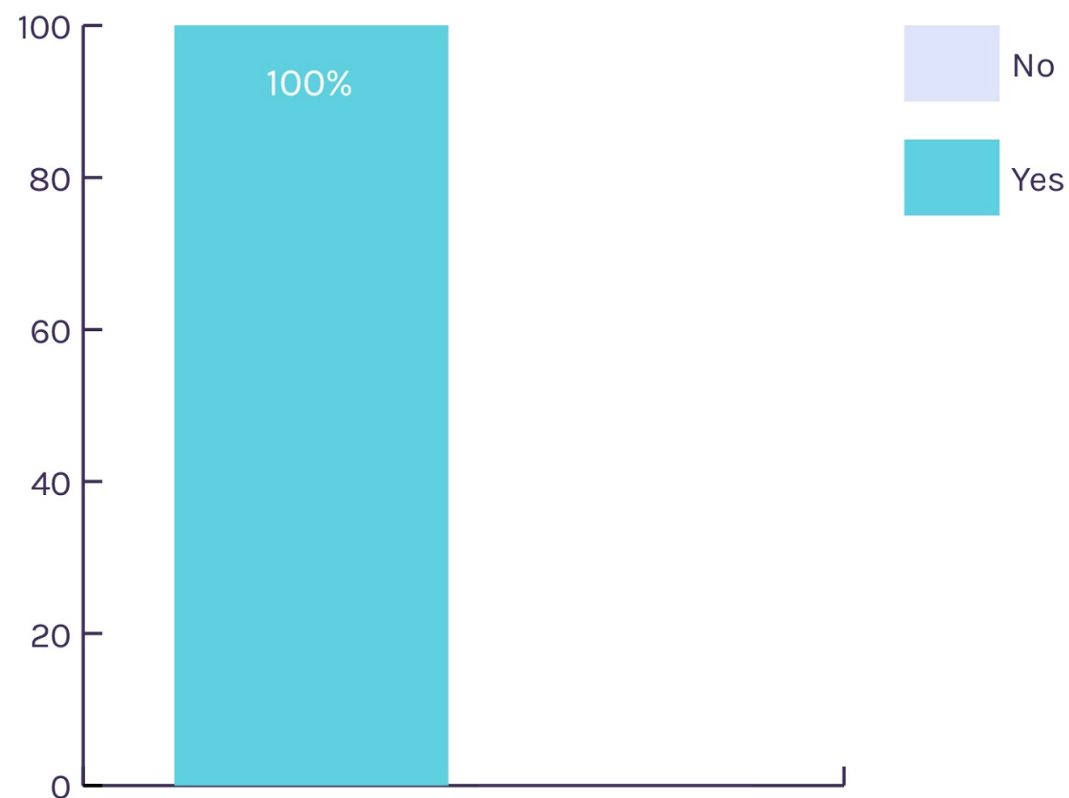


Figure 9. Participants' smartphone ownership

Smartphone Use

The most frequently reported smartphone use time-range was 3-5 hours (Figure 10). 4.9% (N=4) used their phone less than one hour daily. 35.4% (N=29) used their phone 1-2 hours daily, 47.6% (N=39) of participants spent 3-5 hours on their phone daily and 12.2% (N=10) use their phone more than five hours per day.

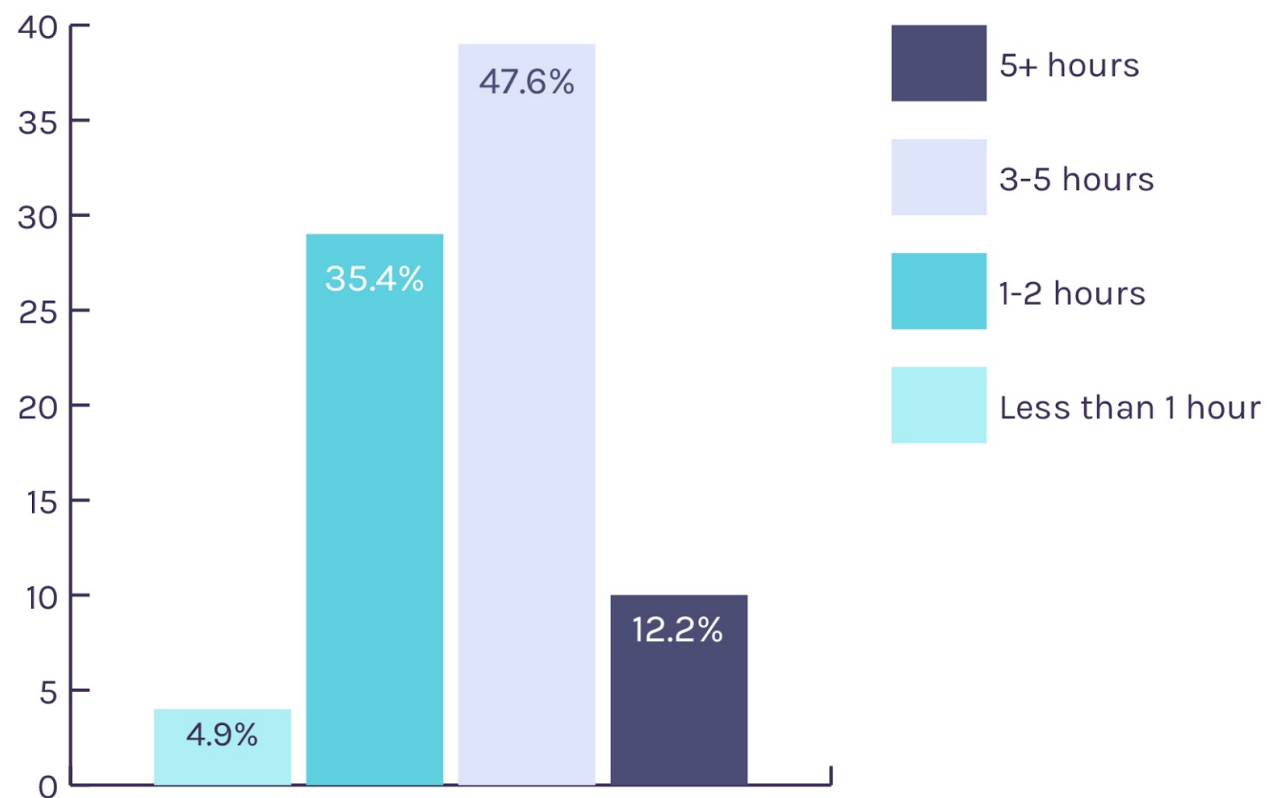


Figure 10. Smartphone use of participants

Smartphone Use and Gender (Figure 11 & 12)

Females spent more time on their smartphones than men (Females = 3-5 hours, Males = 1-2 hours). 66% of females spent 3 or more hours on their phones daily, compared to 48.4% of males. This supports Junco, Merson and Salter (2010), where being female was a strong predictor of higher smartphone use compared to male participants.

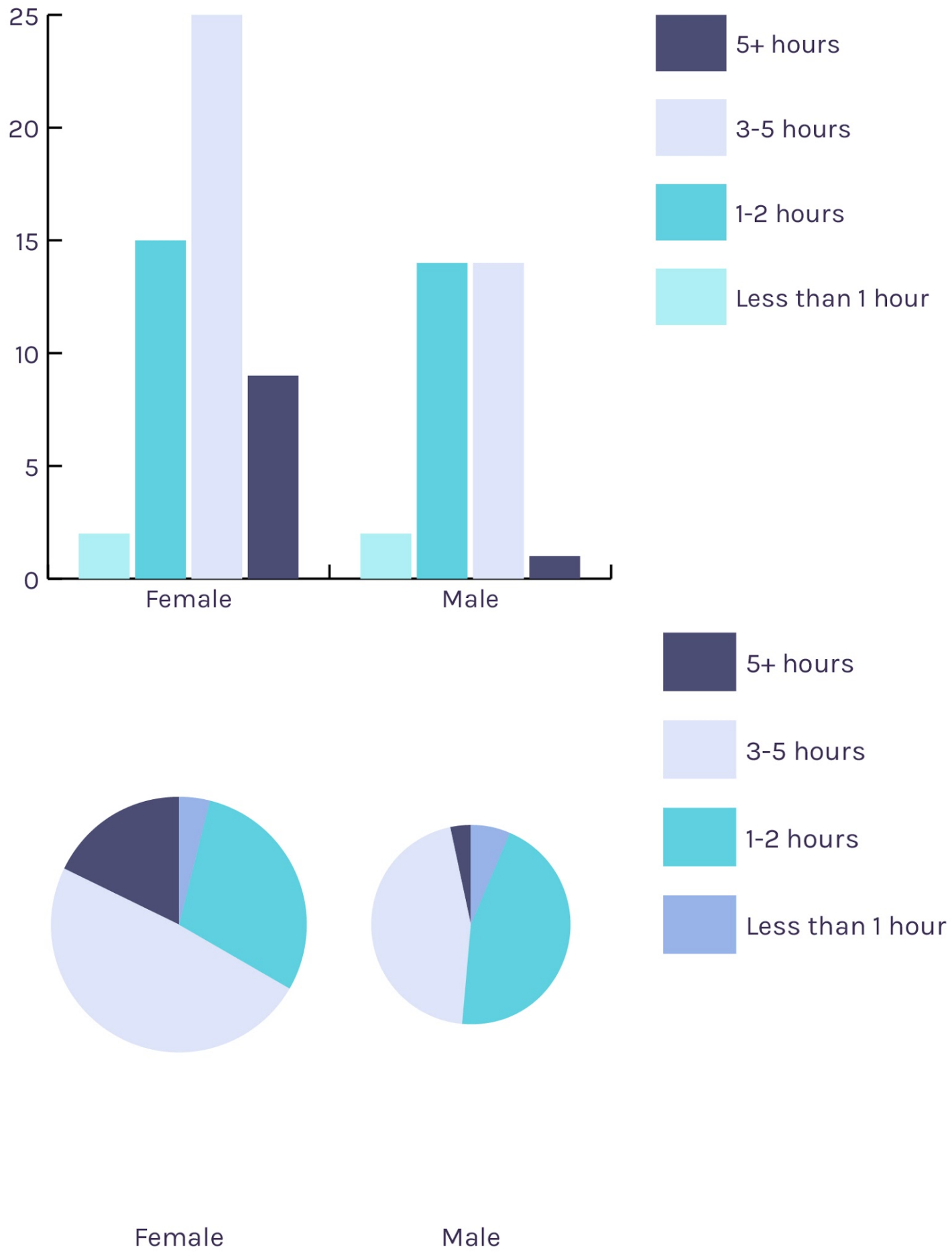


Figure 11. Frequency of male vs female smartphone use.

Gender	Smartphone Use	Frequency	Per cent
Female	Less than 1 hour	2	3.9
	1-2 hours	15	29.4
	3-5 hours	25	49.0
	5+ hours	9	17.6
Male	Less than 1 hour	2	6.5
	1-2 hours	14	45.2
	3-5 hours	14	45.2
	5+ hours	1	3.2

Figure 12. Smartphone use of participants

Participants' Phubbing Experiences

Being phubbed by another person

Participants were asked about their previous phubbing experiences to understand their phubbing perspective. 98% of participants had been phubbed before (Figure 13). Participants, after being phubbed, felt “ignored”, “annoyed”, and “invisible”. Other participants considered it “normal behaviour”. Participants felt phubbers were “unaware”, “oblivious”, and were more interested in their phone than their conversation.

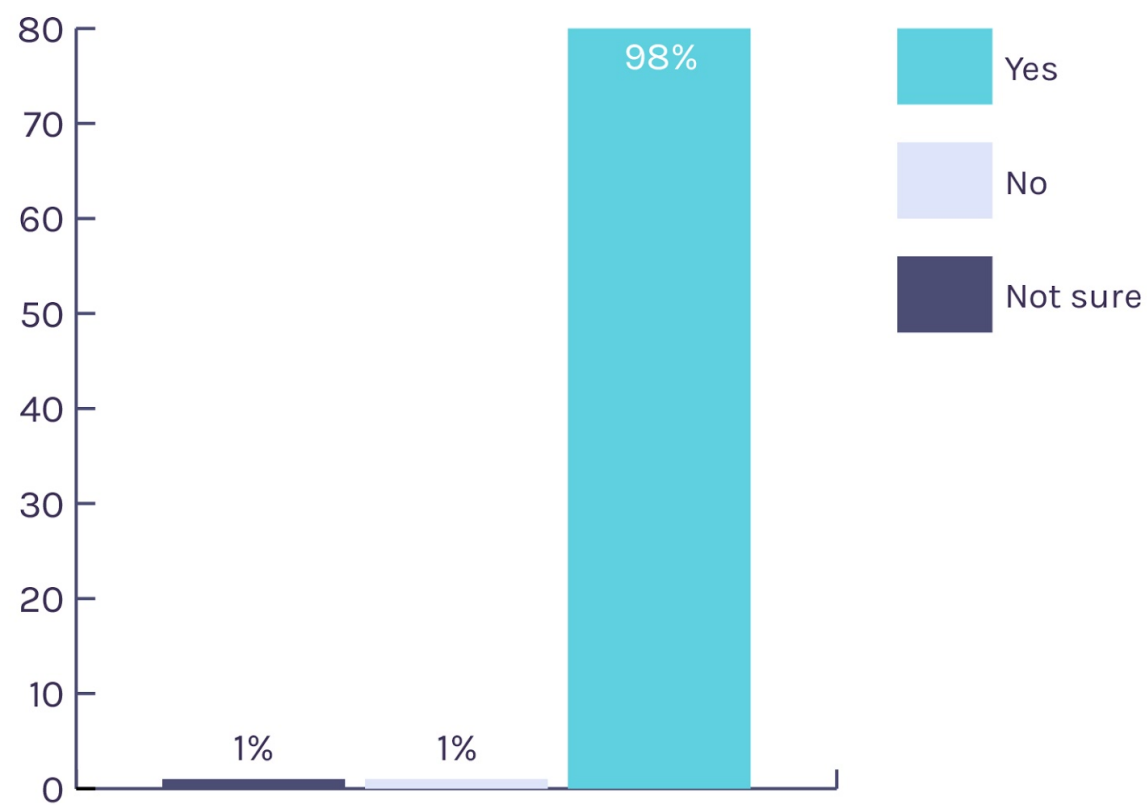


Figure 13. Previously been phubbed by someone else

Phubbing another person

Participants were asked if they phubbed previously (Figure 14). 80.5% had phubbed another person before, 10% were unsure, 7% had not phubbed before, and 2.5% admitted they phubbed their mother! When asked how this made them feel, participants felt “guilty” and “hypocritical”. Five participants said they “revenge phubbed” individuals who phubbed them.

Participants were asked how they thought phubbees felt. Participants believed phubbees felt “annoyed”, “ignored” and “unimportant”. Many participants said phubbees didn’t care as phubbing was normal: “It seems to have become such a normalised activity; you really need someone else to point it out to you to realise you're actually doing it” (Appendix O).

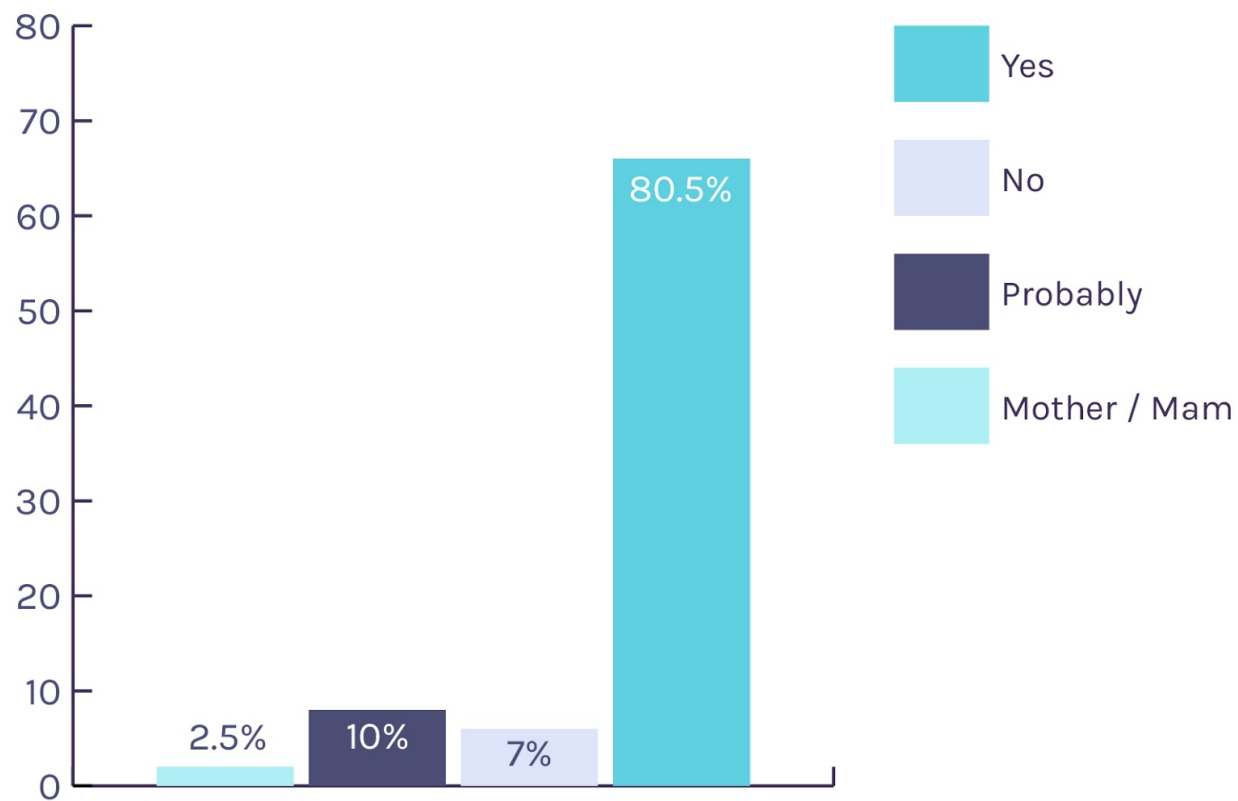


Figure 14. Previously phubbed someone else

Participants’ perception of Phubbing

Participants were asked if they felt phubbing was appropriate (Figure 15). While the majority felt it was not appropriate, some felt it depended on the situation or who it involved. Phubbing was acceptable in emergencies, or, when phubbing strangers. Three participants said they used phubbing to remove themselves from “forced conversation” (Appendix R).

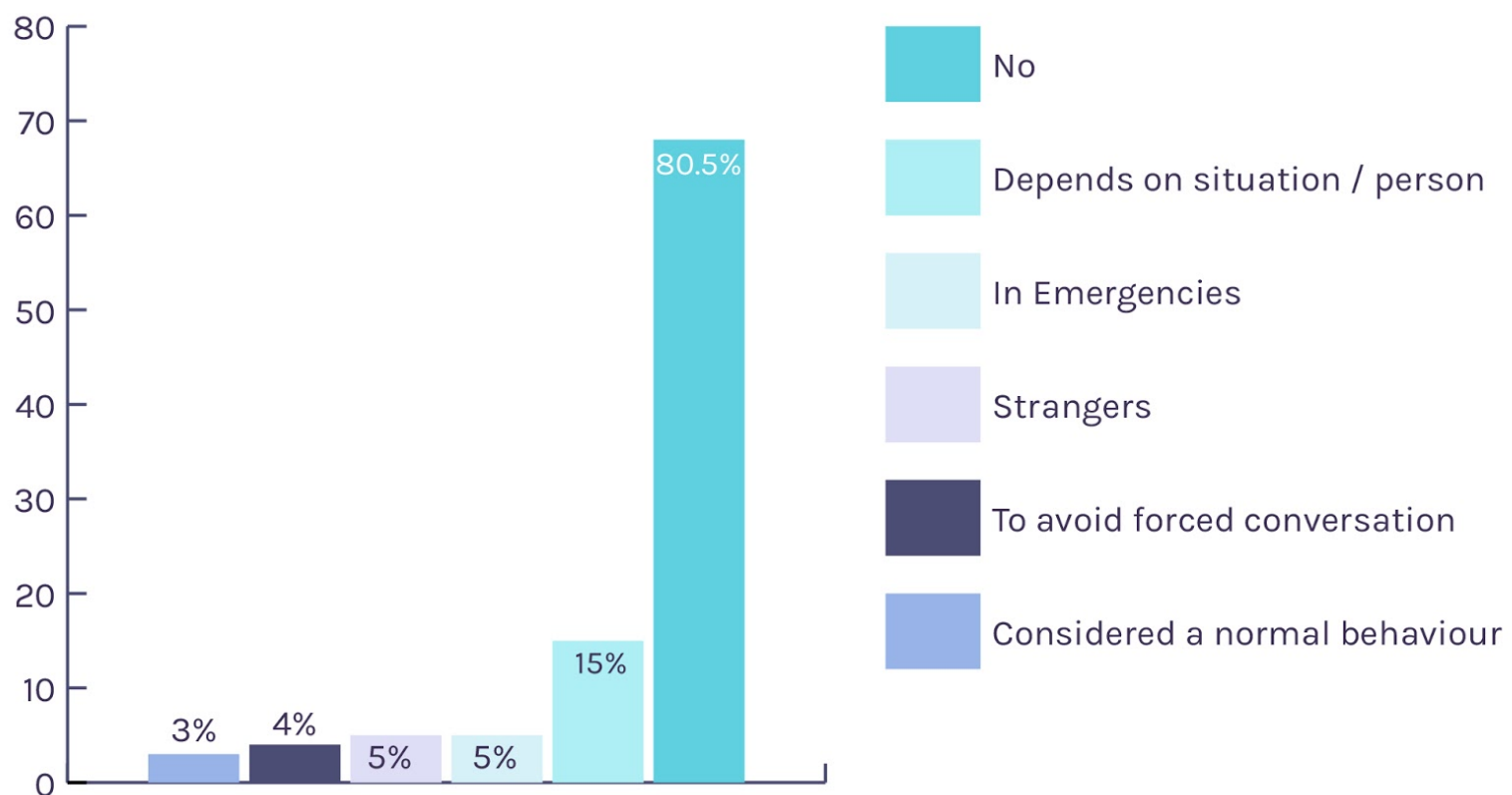


Figure 15. Responses to “Is phubbing acceptable?”

Phubbing in Society

Chotpitayasunondh and Douglas (2018) suggested research should focus on the motivations of phubbers. Participants were asked why people phubbed to gauge their perception of phubbing (Figure 16), which supports Abramova et al. (2017)'s and Chotpityunondh and Douglas' (2016) research.

13% of participants believed phubbing takes place as phubbers have poor manners. One participant said “This seems to overrule standard courtesies now [...] it is so widespread – if everyone is doing it, then it must be acceptable” (Appendix S). Another participant said the reason is a “lack of awareness of how the other person feels” (Appendix S) which supports Turkle’s (2012) research: as we invest more time in our personal devices, our ability to empathise weakens.

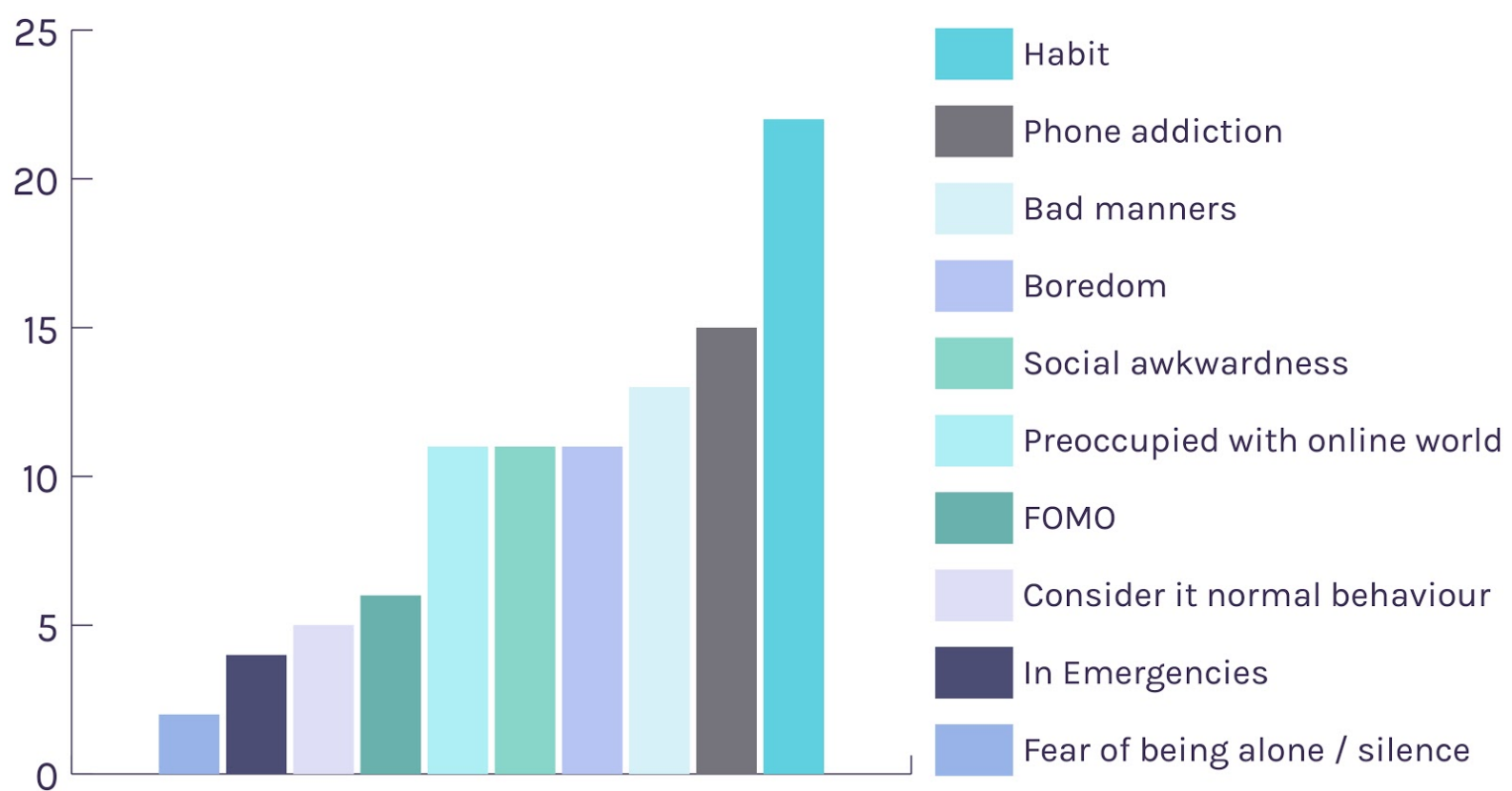


Figure 16. Participants responses to “Why do people phub?”

Participants were asked their opinion on whether they thought people were aware of phubbing (Figure 17). The majority of participants said people were

aware of the behaviour, although not aware of the term “phubbing” (Appendix T). They felt phubbers were unaware of how phubbees felt. Although many participants expressed concern in relation to phubbing, they felt it had, “to our detriment”, become a normative behaviour in society.

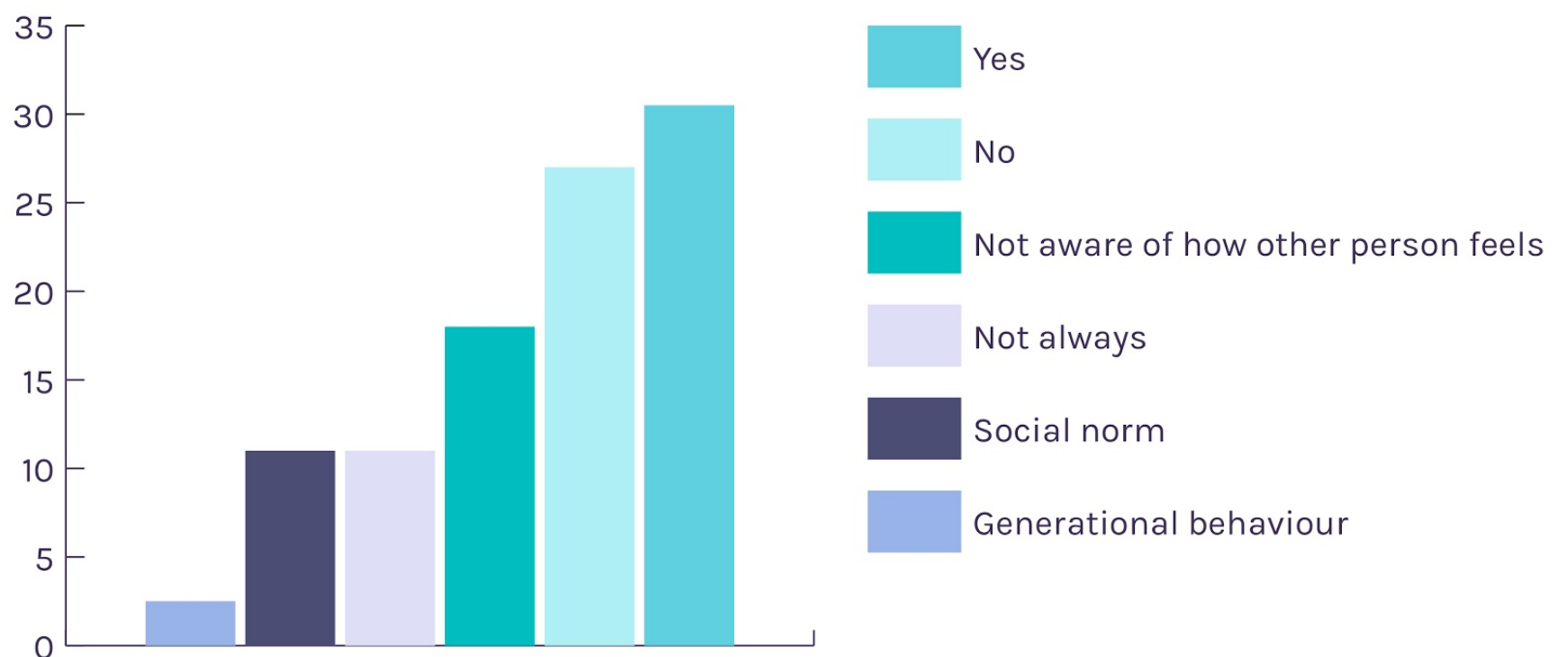


Figure 17. Participants responses to “Are people aware of phubbing?”

Age, Gender and Phubbing

A two-way ANOVA was performed to determine the relationship between age, gender and participants’ phubbing.

Gender	GSP		GSBP		SITES	
	Mean	SD	Mean	SD	Mean	SD
Male	52.55	17.38	99.65	22.40	3.52	1.29
Female	48.47	16.40	95.12	25.30	4.20	.75

Figure 18. GSP, GSBP and SITES scores broken down by gender

Overall males scored higher in the GSP and GSBP, but lower in the SITES (Figure 19 & 20). Males aged 45-54 scored the lowest in the GSP ($M = 32.00$, $SD = 5.29$), compared to females aged 55-64 ($M = 29.67$, $SD = 11.93$). Males ages 55-64 scored highest in the GSP ($M = 67$), compared to females aged 35-44 ($M = 64.00$, $SD = 23.00$) which matched males of the same age. Overall males scored higher in both the GSP and GSBP (Figure 18). Females aged 18-24, 25-34, 44-55 and 55-64 all had higher levels of empathy than males. Females aged 45-54 scored highest in empathy and second lowest in likelihood to phub. Males aged 18-24 scored lowest in empathy and had the second highest GSP scores.

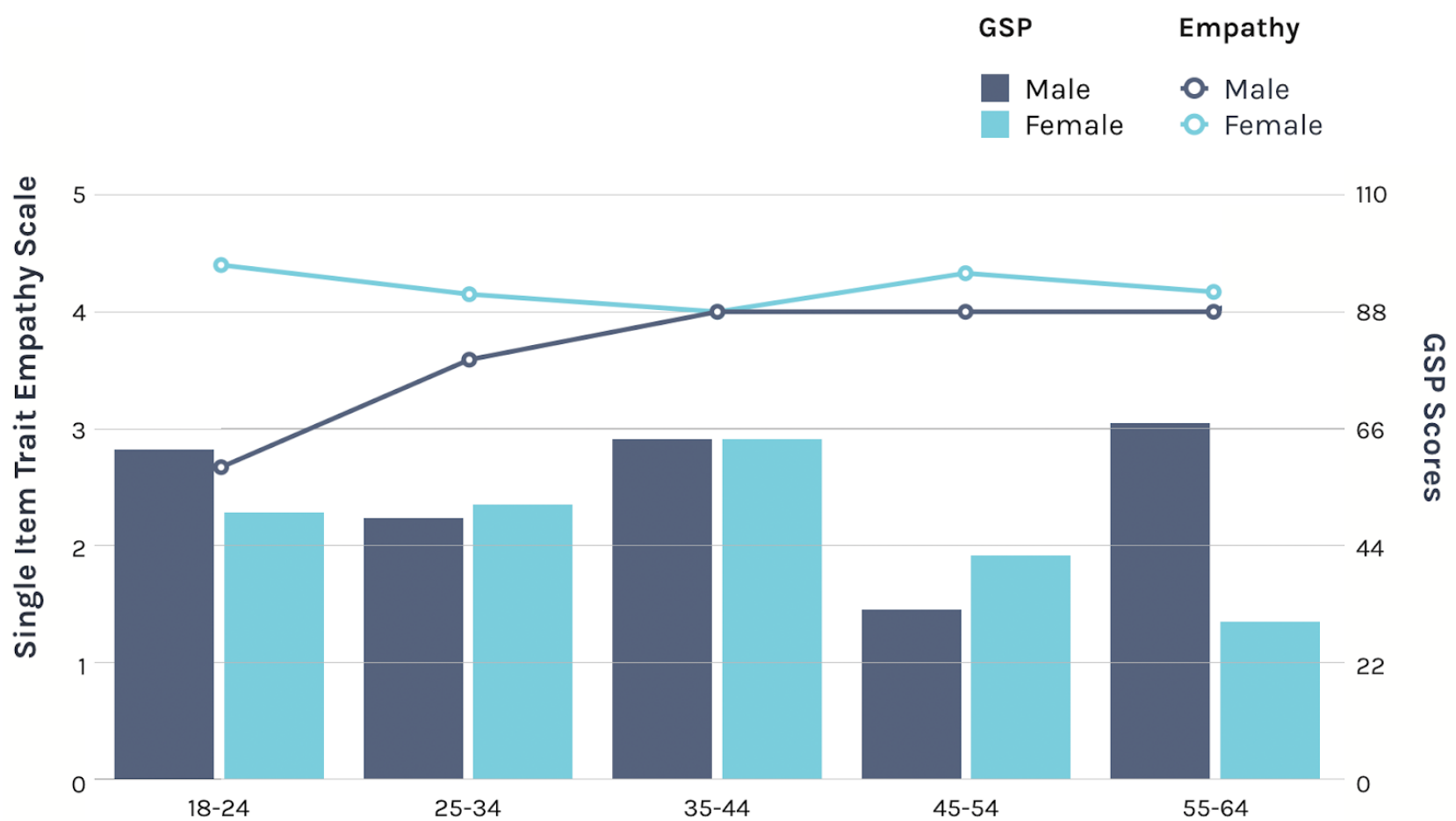


Figure 19. GSP + Empathy scores broken down by age and gender

These results support Konrath et al. (2018) where females had higher empathy levels than males. Previous research suggests empathy levels increase with age (O'Brien et al., 2013), which can be seen in the male results, however females aged 18-24 had the highest levels of empathy overall.

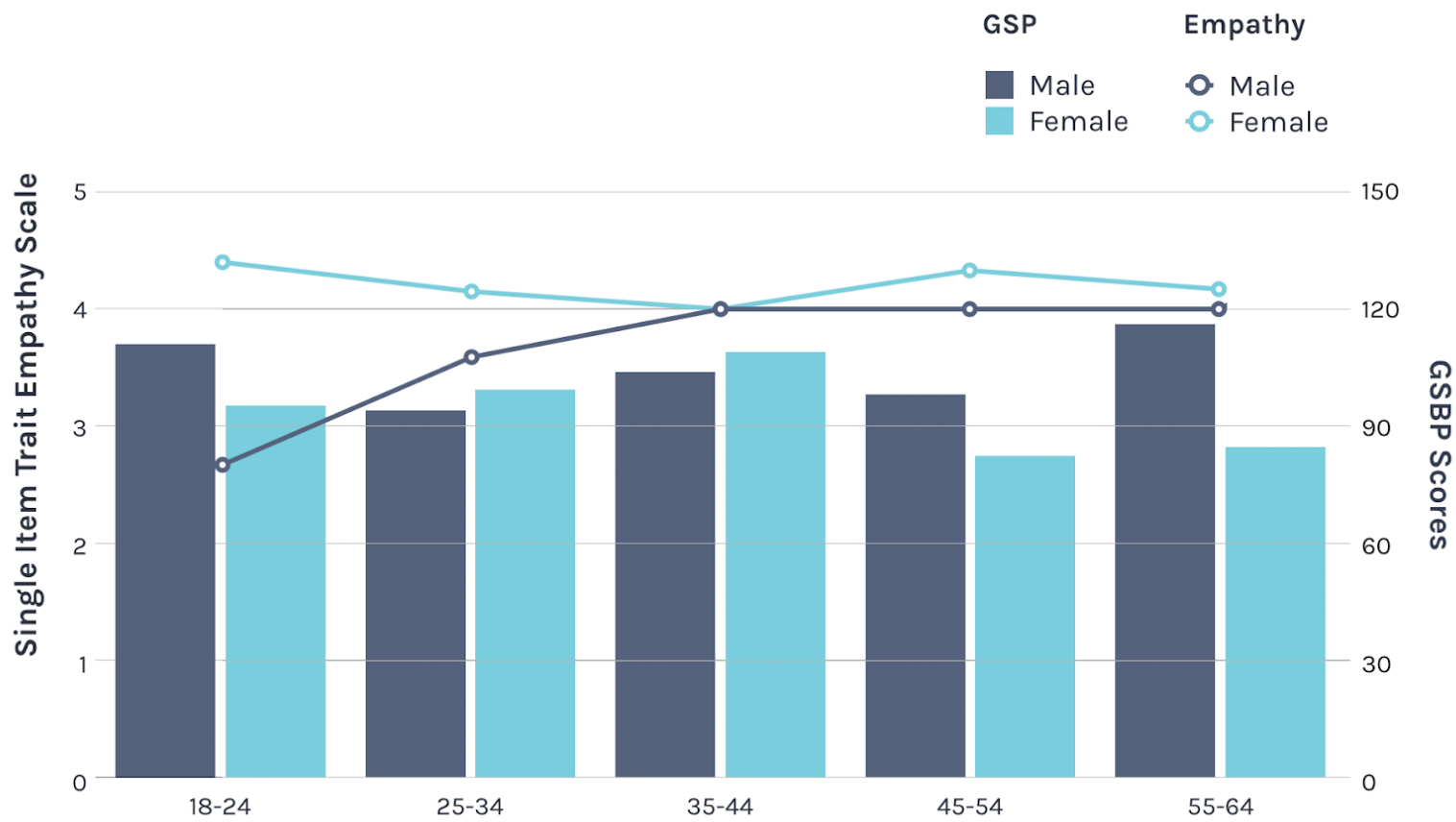


Figure 20. GSBP + Empathy broken down by age and gender

Figure 21 presents the mean and standard deviation of participants’ GSP and GSBP scores by age ranges. This suggests Millennial and Gen Z participants are more accepting of phubbing compared to older generations, supporting Hypothesis 3.

Age	GSP		GSBP		N
	Mean	SD	Mean	SD	
18-24	56.73	19.75	103.82	24.13	11
25-34	50.72	13.32	97.16	23.26	43
35-44	64.00	18.06	106.67	17.04	9
45-54	39.58	12.80	86.33	27.56	12
55-64	35.00	17.82	89.14	29.07	7

Figure 21. Means and Standard deviations of participants’ segmented by age range.

Phubbing Behaviour and Empathy Levels

Further analysis was needed to understand if the GSP and GSBP or participants’ demographics predict phubbing.

Normality and Validity

The researcher calculated the normality and validity of the data. The data was normally distributed (Appendix X). Reliability tests were conducted to ensure the scales had Cronbach alpha values at a minimum level of .7 (Nunnally, 1978). The Cronbach's Alpha for the GSP was $\alpha=.916$ and the GSBP was $\alpha= .941$.

Descriptive Statistics

GSP			GSBP			SITES		
M	SD	Total possible score	M	SD	Total possible score	M	SD	Total possible score
50.01	16.79	105	96.83	24.20	147	3.94	1.04	5

Figure 22. Descriptive Statistics of GSP, SGBP & SITES

From this, we can see participants believed the statement “I am an empathetic person” is very true of them.

Multiple Regression

This study aimed to understand the predictors of phubbing behaviour. To examine this relationship, standard multiple regression was performed to examine the influence of participant's GSP scores, GSBP scores, age, gender, phone use and previous phubbing experiences related to empathy levels. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

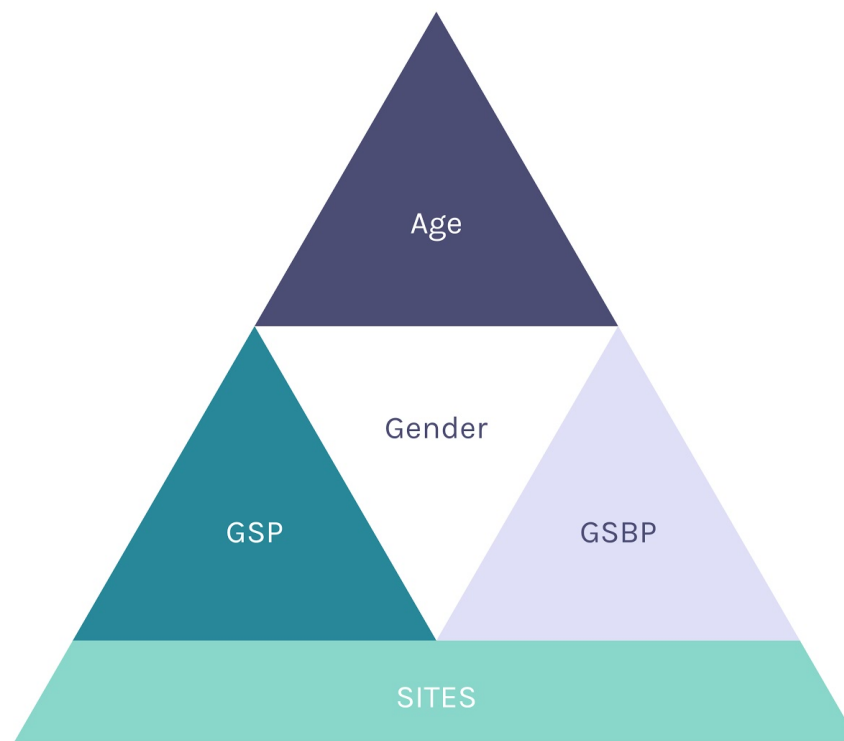


Figure 23. Model 1

Model	t	Sig
(Constant)	6.420	.000
Age	.007	.994
Gender	2.701	.008
Total_GSP	-3.209	.002
Total_GSBP	-.407	.685

b. Dependent variable: To what extent does the following statement describe you: “I am an empathetic person”

Figure 24. Model 1 regression (see full output in Appendix J)

Model 1 (Figure 23 & 24) examined the relationship between age, gender, GSP, GSBP and SITES. A significant regression equation was found ($F(21,65) = 6.261, p < .001$), with an R^2 of .245. In this model, the GSP made the strongest unique contribution (10%) to empathy levels when all other variables are controlled for. Gender also significantly predicts empathy,

contributing to 7% of the variance, which supports the findings of Konrath et al. (2017).

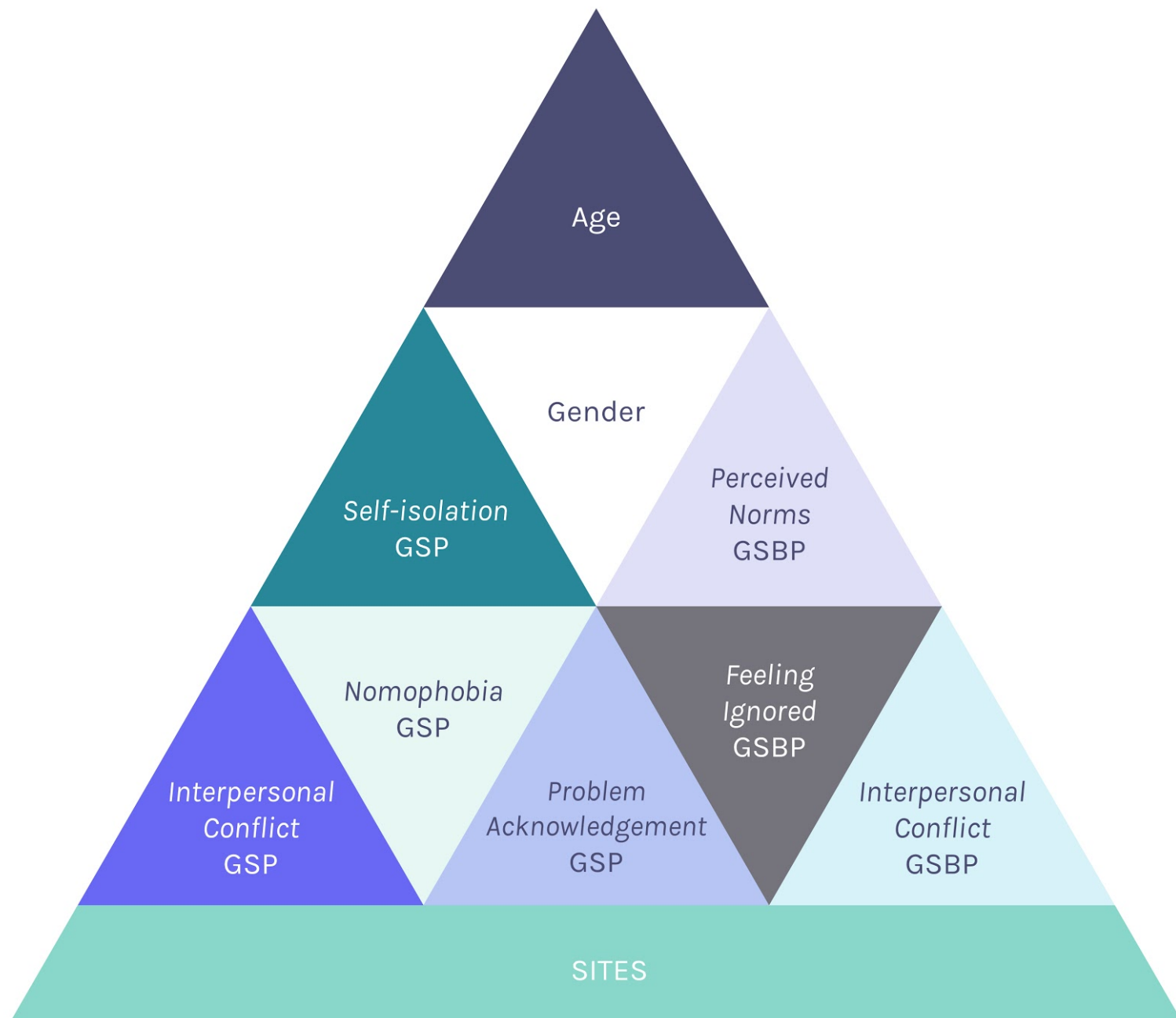


Figure 25. Model 2

Model 2 (Figure 25 & 26) examined the relationship between age, gender, the GSP and GSBP subscales, and the SITES. A significant regression equation was found ($F(31,55) = 4.529, p < .001$), with an R^2 of .361. In this model, the GSP factor for self-isolation made the strongest unique contribution (9%) to empathy when all other variables in the model are controlled for.

			Correlations
Model	t	Sig	Part
(Constant)	4.865	.000	
Age	.610	.544	.057
Gender	1.736	.087	.164
GSP_PA	.325	.746	.031
GSP_SI	-3.352	.001	-.316
GSP_IC	.278	.782	.026
GSP_NP	-.251	.802	-.024
GSBP_FI	-.572	.569	-.054
GSBP_IC	-.558	.578	-.053
GSBP_PN	.915	.363	.086

- a. Dependent variable: To what extent does the following statement describe you: "I am an empathetic person"

Table 26. Model 2 regression (see full output in [Appendix K](#))

Model 3 ([Figure 27 & 28](#)) examined the relationship between the GSP, GSBP and SITES. A significant regression equation was found ($F(33,54) = 3.463, p < .001$), with an R^2 of .376. In this model, the GSP factor for self-isolation made the strongest unique contribution (9%) to empathy when all other variables in the model are controlled for.

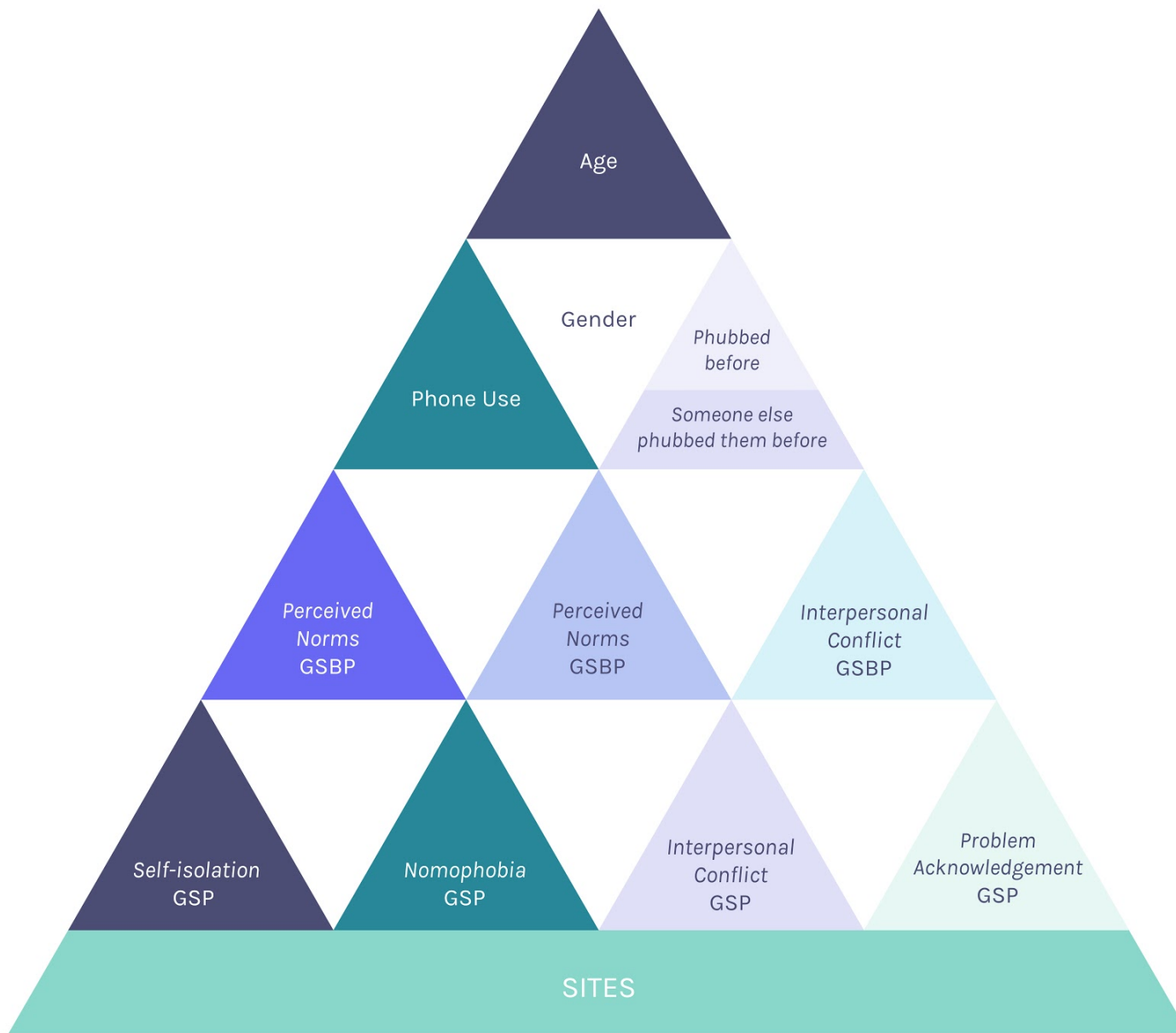


Figure 27. Model 3

			Correlations
Model	t	Sig	Part
(Constant)	2.779	.007	
Age	.642	.523	.061
Gender	1.1689	.096	.161
GSP_PA	.306	.761	.029
GSP_SI	-3.058	.003	-.291
GSP_IC	.387	.700	.037
GSP_NP	-.516	.608	-.049
GSBP_FI	-.642	.523	-.061
GSBP_IC	-.708	.481	-.067
GSBP_PN	1.046	.299	.099
Been Phubbed before	-.243	.809	-.023
Phubbed another person before	1.170	.288	.102
Phone use	.493	.623	.047

b. Dependent variable: To what extent does the following statement describe you: "I am an empathetic person"

Figure 28. Model 3 regression (see full output in [Appendix L](#))

The final standard regression examined the relationship between the GSP and the GSBP ([Figure 29 & 30](#)). A significant regression equation was found ($F(8385,14441) = 6.138, p < .001$), with an R^2 of .367. In this model, the GSBP makes the strongest unique contribution (10%) to empathy levels when all other variables in the model are controlled for. Empathy also correlates significantly to the GSP scale. This supports Chotpitayasunondh & Douglas' ([2016](#)) research where participants who phubbed their partner were more likely to be phubbed in return.

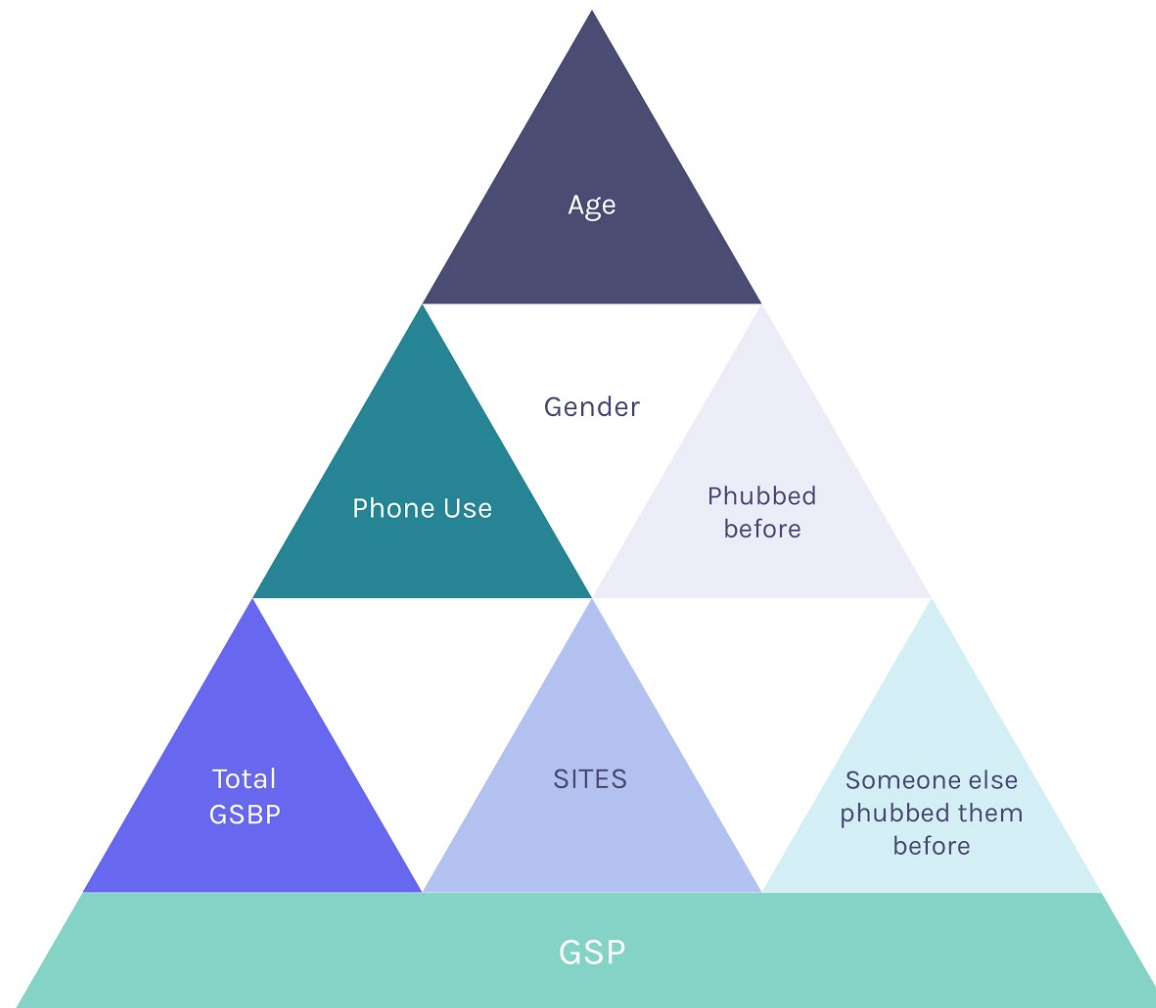


Figure 29. Model 4

			Correlations
Model	t	Sig	Part
(Constant)	2.545	.013	
Total_GSBP	2.889	.005	.267
SITES	-3.368	.001	-.311
Age	-1.465	.147	-.135
Gender	-.132	.896	-.012
Time_SmartphoneUse	2.440	.017	.226
Been phubbed before	.063	.950	.006
Phubbed before	-.393	.696	-.036

Figure 30. Model 4 regression (see full output in [Appendix M](#))

Chapter 4

Discussion

Introduction

The present research was conducted to further understand the variables that predict phubbing. This chapter examines the results, analyses the study's strengths and weaknesses, provides suggestions for further research and concludes with this study's contribution to the literature.

Results

The results examine phubbing related to age, gender, smartphone use, the relationship between phubbing and empathy, and the Irish perception of phubbing.

Age, Gender, Smartphone Use and Phubbing

Results show age, gender, and smartphone use predict phubbing behaviour.

Age and Phubbing

People of all ages are spending more time on their phone, impacting their relationships with others ([Roberts & David, 2016](#); [Roberts & Pirog, 2013](#)). Results related to participants' age and phubbing supported hypothesis three. Millennials and Gen Z (aged 16-35)'s mean scores were higher in the GSP and GSBP than older participants. One participant said "Millennials and Gen Z don't seem to consider it rude, but older generations do" ([Appendix S](#)).

When asked why people phubbed, 13% said it was because of bad manners (Figure 16). 10% of these participants were not Millennials or Gen Z.

Hakoama & Hakoyama (2012) found older people often view other people's smartphone behaviour as negative compared to their own.

Gender and phubbing

Although females use their phones more than males for social reasons (Junco et al., 2010; Junco & Cole-Avent, 2008; Geser, 2006), the GSP scores suggest males are more likely to phub than females (Figure 18), supporting Moises and Vera-Perea's (2019) research. The GSBP examines participants' experience of being phubbed. Male GSBP scores were higher than females which suggests males are more likely to phub, but dislike being phubbed more. Moises and Vera-Perea's (2019) research found males experience issues due to technology interfering in everyday situations which can lead to conflict.

Model 4 found the GSP significantly correlates to the GSBP. This suggests that being phubbed predicts participants' likelihood to phubbing others (Appendix M). Participants "revenge phubbed" (Appendix N) individuals who phubbed them.

Smartphone use and gender

Several studies into phone attachment found females had higher levels of attachment and dependency than males (Geser 2006; Leung, 2008; Wei & Lo, 2006). The majority of female participants spend 3+ hours on their phone daily (Figure 11). Junco, Merson and Salter's (2010) research found female participants were more likely to use their phone than males.

Empathy and Phubbing

Multiple regression was used to understand the correlations of participants' empathy level and phubbing behaviour.

Self-Isolation

Model 3 found self-isolation correlated significantly to empathy.

Participants qualitative responses supported these findings as many felt individuals phub to be alone as they fear social awkwardness (Figure 16).

This supports Chotpitayasunondh & Douglas' (2018) research where individuals isolate themselves to escape social activities around them. USA internet use increased levels of social isolation and decreased face-to-face communication (Markoff, 2000). Turkle (2016) fears without human interaction, we lose the ability to understand one another. With greater online communication, we experience less eye contact during face-to-face communication, crucial for relationship development (Shellenbarger, 2013; Riess, 2013).

Being alone

Results suggested participants use phones to avoid silence and being alone (Figure 16). Smartphones provide us with a constant feed of connection which alleviates boredom (Turkle, 2016). If we continue to use smartphones and avoid moments of solitude, we ignore time for self-reflection, problem-solving and creative-thinking (Kegley, 2018).

Klinger's (2009) research found daydreaming is important for humans to process information. It is therefore vital to embrace moments of solitude or we will risk, not only the development of relationships, but our ability to function.

Awareness of others

Turkle (2016) fears as our phone use increases, our ability to empathise decreases. When asked why people phub, 18% of participants felt the phubber was oblivious of the phubbee (Figure 17). One participant said the reason is a “lack of awareness of how the other person feels” (Appendix S). This suggests as phubbing increases, our ability to empathise and understand the people around us decreases which supports Hypothesis 1 and 2.

Irish perception of Phubbing

When asked why people phub, participants believed it was habitual or phone addiction. Other responses included bad manners, boredom and social awkwardness.

Phone addiction

Previous studies linked phubbing and phone addiction (Chotpitayasunondh and Douglas 2016; Karadağ et al. 2015). Although 15% participants believed our “phone addiction” (Appendix S) has resulted in many conversations with loved-ones, colleagues and classmates being diminished, in this study, nomophobia was not found to significantly predict phubbing.

Habit

The majority of participants considered phubbing a habit and normal in society. Although many people consider phubbing an unacceptable social behaviour, the majority of participants had both phubbed and been phubbed (see Figures 19 & 20). Participants felt “irritated”, “annoyed” and “disrespected” when they were phubbed (supporting Wei & Leung’s [1999] research), yet admitted phubbing was normal and accepted in society.

Aagaard (2019) defined “digital akrasia” as “to become swept up by ones digital devices in spite of better intentions” (p1).

In the 2015 Pew Research Report, 82% participants believed phones negatively interrupted communication, yet 89% had used smartphones during their recent conversations (Rainie & Zickuhr, 2015). Technology challenges our willpower and values, persuading us to make choices we would not always (Aagaard, 2019). McDaniel and Coyne (2014) suggest individuals can experience technological interruptions without their phone use deemed problematic or addictive. Aagaard (2019) believes phubbing is linked to individuals’ character flaws. He feels digital akrasia should be discussed in relation to the morality/ethics of technology and not related to problematic phone use (Aagaard, 2019).

Strengths & Limitations

Strengths

Explainer video

As “phubbing” is an uncommon term, an explainer video was used to describe the concept simply, in an entertaining way (Krämer & Böhrs, 2017). Bonk (2011) found explainer videos save time in research as concepts can be explained quickly to participants. The researcher hoped this would remove any confusion for participants, and would encourage them to complete the study. The video’s script was simple to ensure all participants could understand what phubbing is before answering any questions (Schmelzle, 2014). Through the use of visuals, approachable language and music, participants gained a complete understanding of phubbing (Krämer & Böhrs, 2017).

Under-researched area

While the number of studies conducted in relation to phubbing is growing, there has been no research conducted into Irish phubbing behaviour.

Ireland has the highest mobile-phone use in Europe ([Deloitte, 2018](#)). This research sheds light on the phubbing behaviour of Irish smartphone users and makes an important contribution to the literature.

Smartphone use continues to rise annually and the impact phones have on individuals personally, professionally and academically warrants further study ([Chotpitayasunondh & Douglas, 2016](#)). As this is the first study to specifically analyse phubbing and empathy, this research contributes to our understanding of why we phub and how it impacts us and those around us.

Limitations

Several limitations have been identified in this study:

Sample

Due to the short time-frame of this research, the sample-size used was small. As participants were recruited online and many were friends or acquaintances of the researcher, the sample was not random. Also, the number of males-females was unbalanced. Further research with a larger, more balanced sample-size is needed to understand the generalizability of these findings ([Pallant, 2013](#)).

Response rate

Allowing participants to complete the survey in their own time could negatively impact response rates of the questionnaire. Participants could

postpone the questionnaire completion and consequently, forget to complete it (Lefever et al., 2007).

Control of Setting

The questionnaire was completed online, outside a controlled setting. The researcher hoped allowing participants to complete the survey in their own time and space would reduce the Hawthorne Effect (Lefever et al., 2007).

Further Research

Other empathy scales

As the length of the questionnaire was long, the researcher chose to use the SITES to measure participants' empathy levels, as participants response would take seconds to submit (Konrath et al., 2018). Further research could utilise different empathy scales to measure the different facets of empathy (Konrath et al., 2018). The IRI could examine individuals' levels of fantasy, empathetic concern, perspective taking and personal distress (Davis, 1983).

Longitudinal Study

As this was a correlational study, the researcher was unable to determine the causes of phubbing. Longer studies, with multiple data collection points, would allow researchers to examine the long-term causal effects of phubbing (Chotpitayasunondh & Douglas, 2018).

Irish Smartphone Users

Although there is previous research examining phone use (Harris, Harris, Carlson, & Carlson, 2015; Junco & Cotten, 2012), as our smartphone use continues to grow, further scientific research is needed in order to understand the impact our personal devices have on our relationships. As

phubbing becomes more prevalent and normal in society, further research is needed to understand why we think it is normal, yet unacceptable. Given the dearth of phubbing research in Ireland, this study fills an important gap in the literature. Further research into Irish phubbing is necessary in order to effectively compare Irish behaviour to other studies internationally.

Conclusion

Smartphones are prevalent in Irish society: 100% of participants owned smartphones. Despite the many advantages of smartphones, participants acknowledged they often lacked the self-control to focus on the person/people in their company. Although not all participants knew the term “phubbing”, 93% of participants had phubbed previously and 98% had been phubbed before (Figure 13 & 14). Turkle (2012) fears as we become more dependant on our phones, we risk losing the art of conversation and human interaction.

Without empathy, the development of social relationships will suffer (Abeelee et al., 2016; Turkle, 2012). Our most fundamental need is social relationships (Lee & Shrum, 2012, Leary, 1990; Mead et al., 2010; Baumeister & Tice, 1990). The Guinness’ Switch-to-Pub-Mode (Moonan, 2018) and Frankie and Benny’s No Phone Policy (Petter, 2018) are prime examples of campaigns that encourage face-to-face communication which allows us to empathise and understand the people around us (Roberts & David, 2017; Roberts and David, 2016). As we become more connected online, we become more disconnected offline (McDaniel & Coyne, 2014; Roberts & David, 2016; Bhatia, 2016). In our world of ceaseless connection, it is important to take moments of self-reflection to continue empathising and understanding others (Kegley, 2018). We cannot allow society to become empathetically disconnected and must become smarter about how we use smartphone

technology. Rather than fearing social isolation, we must learn to cherish our personal solitude and moments of introspection.



Figure 31. Guinness Switch-To-Pub Mode (Moss, 2014).

We communicate in a new language of abbreviation in which letters stand for words and emoticons for feelings. These things which substitute for face-to-face conversation are not so good for opening a dialogue about complexity of feeling. We are increasingly connected to each other but oddly more alone: in intimacy, new solitudes.

S H E R R Y T U R K L E

(Turkle, 2017, p19)

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Appendices

Appendix A.

Information Sheet

Study Title

Connected by Technology, Empathetically Disconnected: A Correlational study into Phubbing Behaviour in Ireland

Purpose of the Research

The aim of this research is to gain a better understanding of the implications of empathy on phubbing behaviour.

Invitation

You are being invited to consider taking part in this research study. This project is being undertaken by Roisin O'Flaherty. This study is being conducted in pursuit of a Cyberpsychology Masters in the Institute of Art, Design and Technology, Dublin. Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Ask us if there is anything that is unclear or if you would like more information. If you have any questions, please get in touch with Roisin at N00110636@iadt.ie or her supervisor, Liam, liam.challenor@dcu.ie. This study has been approved by the IADT Institute Research Ethics Committee.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to indicate your consent through completion of a short form. You are free to withdraw from this study at any time and without giving reasons.

If I take part, what do I have to do?

Before starting the experiment, you will be asked to complete a short consent form. If you agree to partake in the study, you will be asked to complete a short questionnaire about your weekly video game activity. Following the video, you will be asked to complete the Questionnaire. The total experiment time should take no longer than 33 minutes to complete. Following the experiment, you will be guided through a Debrief to thank you for your time and ensure you are happy to include your data in the analysis.

Following the questionnaire, you will be asked if you would like to volunteer to partake in the Interview stage of this experiment. If you agree, the researcher will be in touch to organise a time that suits you.

How will information about me be used and who will have access to it? Your data will be collated anonymously in a spreadsheet in order to allow the researcher to examine and analyse the collected data. It will be stored on a secure password protected computer. The data will be retained by the researcher for two years until after the Master's programme has been completed. The results from this study will be used in the researcher's CA1 Assignment paper. The research will be collected as part of the MSc in Cyberpsychology at the Institute of Art, Design and Technology, Dublin. If you would like to receive a copy of your data following the experiment, please email N00110636@student.iadt.ie.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact Roisin O'Flaherty at N00110636@student.iadt.ie or her supervisor Liam at liam.challenor@dcu.ie.

Appendix B.

Consent Form

Study Title

Connected by Technology, Empathetically Disconnected: A Correlational study into Phubbing Behaviour in Ireland

Name of Researcher

Roisin O'Flaherty

Name of Supervisor

Liam Challenor

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.
2. I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified.
3. I agree that data gathered in this study may be stored anonymously and securely, and may be used in.
4. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.
5. I understand that my participation is voluntary and that I am free to withdraw at any time.
6. I am over the age of 18 years and I agree to take part in this study.
7. I agree to take part in this study.

Please tick the box if you give your consent.

Appendix C.

Explainer Video



View the full video here: <https://www.youtube.com/watch?v=VEIOpKUiqg8>

Appendix D.

Demographics Questions

1. Age *

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

2. Gender

- Male
- Female
- Prefer not to say
- Other (Please specify)

3. Do you own a smartphone?

- Yes
- No

4. How much time do you think you spend on your phone daily? *

- Less than 1 hour
- 1 - 2 hours
- 3 - 5 hours
- 5+ hours

Appendix E.

Qualitative Items - Phubbing Experiences

Following the explainer video, the participants will be invited to answer a number of questions to allow the researcher to gain better insight into the individual. Participants will also be asked to provide some demographics.

These questions include:

1. Have you been phubbed by someone before?
2. How did that make you feel?
3. How do you think the phubber felt?
4. Have you phubbed another person before?
5. How did that make you feel?
6. How do you think it made the phubbee (the person you were phubbing) feel?
7. Do you think phubbing is appropriate?
8. Do you think people are aware of phubbing behaviour?

Appendix F.

Generic Scale of Phubbing

The GSP scale is a measure of phubbing (phone-snubbing) in social interactions.

Participants respond to items on a seven-point scale, with a label associated with each point (1 = *Never*, 2 = *Rarely*, 3 = *Occasionally*, 4 = *Sometimes*, 5 = *Frequently*, 6 = *Usually*, 7 = *Always*) (a range between .82 - .93).

The instructions to respondents are as follows:

We would like you to think about your mobile phone use during your face-to-face social interactions with others. Think about your social interactions on the whole (e.g., with friends, acquaintances, family, your partner) and the extent to which the following statements apply to you. In my face-to-face social interactions with others.”

1. I feel anxious if my phone is not nearby
2. I cannot stand leaving my phone alone
3. I place my phone where I can see it
4. I worry that I will miss something important if I do not check my phone
5. I have conflicts with others because I am using my phone
6. People tell me that I interact with my phone too much
7. I get irritated if others ask me to get off my phone and talk to them
8. I use my phone even though I know it irritates others
9. I would rather pay attention to my phone than talk to others
10. I feel content when I am paying attention to my phone instead of others
11. I feel good when I stop focusing on others and pay attention to my phone instead
12. I get rid of stress by ignoring others and paying attention to my phone instead
13. I pay attention to my phone for longer than I intend to do so
14. I know that I must miss opportunities to talk to others because I am using my phone
15. I find myself thinking “just a few more minutes” when I am using my phone

The GSP consists of 4 factors: Nomophobia (NP, items 1-4), Interpersonal conflict (IC, items 5-8), Self-isolation (SI, items 9-12), and Problem acknowledgement (PA, items 13-15).

The GSP measure is scored by summing all item scores.

Code	Item	Factor			
		NP	IC	SI	PA
GSP_1	I feel anxious if my phone is not nearby	.79	.02	.13	-.15
GSP_2	I cannot stand leaving my phone alone	.70	.18	.13	-.09
GSP_3	I place my phone where I can see it	.62	-.15	.05	.11
GSP_4	I worry that I will miss something important if I do not check my phone	.54	.27	.04	.02
GSP_5	I have conflicts with others because I am using my phone	-.04	.84	.03	-.07
GSP_6	People tell me that I interact with my phone too much	.08	.66	.06	.04
GSP_7	I get irritated if others ask me to get off my phone and talk to them	.10	.63	.25	-.00
GSP_8	I use my phone even though I know it irritates others	-.00	.60	.08	.23
GSP_9	I would rather pay attention to my phone than talk to others	-.10	.10	.75	.02

GSP_10	I feel content when I am paying attention to my phone instead of others	.18	.04	.69	-.10
GSP_11	I feel good when I stop focusing on others and pay attention to my phone instead	.20	.22	.51	-.20
GSP_12	I get rid of stress by ignoring others and paying attention to my phone instead	.18	.04	.51	.16
GSP_13	I pay attention to my phone for longer than I intend to do so	.15	.06	.01	.73
GSP_14	I know that I must miss opportunities to talk to others because I am using my phone	-.10	.23	.11	.55
GSP_15	I find myself thinking “just a few more minutes” when I am using my phone	.21	.22	-.10	.50
	Unrotated Eigenvalues	15.24	1.69	1.10	1.03
	% Of variance accounted for following rotation	52.56	5.81	3.80	3.55

Appendix G.

Generic Scale of Being Phubbed (GSBP)

The GSBP scale is a measure of the experience of being phubbed in social interactions.

Participants respond to items on a seven-point scale, with a label associated with each point (1 = *Never*, 2 = *Rarely*, 3 = *Occasionally*, 4 = *Sometimes*, 5 = *Frequently*, 6 = *Usually*, 7 = *Always*) (a range between .92 - .97).

The instructions to respondents are as follows:

“We would like you to think about others’ mobile phone use during your face-to-face social interactions with others. Think about your social interactions on the whole (e.g., with friends, acquaintances, family, your partner) and the extent to which the following statements apply to you. In my face-to-face social interactions with others”

1. Others seem to check their phones for messages and social media updates
2. Others seem to be using their phones to go online
3. Others place their phones where they can see them
4. Others seem worried that they will miss something important if they do not check their phones
5. Others seem like they lose awareness of their surroundings because of their phone use
6. Others seem like they have a difficult time putting their phones down
7. Others seem like they cannot stand leaving their phones alone
8. Others seem like they are “in their own worlds” using their phones
9. Others seem anxious if their phones are not nearby
10. Others pay attention to their phones rather than talking to me
11. Others would rather pay attention to their phones than talk to me
12. Others seem like they get rid of boredom by paying attention to their phones instead of me
13. Others seem like they feel content when they are paying attention to their phones instead of me
14. Others pay attention to their phones rather than focusing on me

15. Others seem like they get rid of stress by paying attention to their phones instead of me
16. Others seem like they feel good when they stop focusing on me and pay attention to their phones instead
17. Others shift their attention from me to their phones
18. I tell others that they interact with their phones too much
19. I have conflicts with others because they are using their phones
20. I find myself thinking “I’ve had enough” when others are using their phones
21. Others use their phones even though they know it irritates me
22. Others seem like they get irritated if I ask them to get off their phones and talk to me

The GSBP consists of 3 factors: Perceived norms (PN, items 1-9), Feeling ignored (FI, items 10-17), and Interpersonal conflict (IC, items 18-22).

Code	Item	Factor		
		PN	FI	IC
GSBP_1	Others seem to check their phones for messages and social media updates	.87	.06	-0.16
GSBP_2	Others seem to be using their phones to go online	.76	.12	-.21
GSBP_3	Others place their phones where they can see them	.75	.009	-.05
GSBP_4	Others seem worried that they will miss something important if they do not check their phones	.71	.02	.08
GSBP_5	Others seem like they lose awareness of their surroundings because of their phone use	.70	-.09	.20

GSBP_6	Others seem like they have a difficult time putting their phones down	.66	.12	.11
GSBP_7	Others seem like they cannot stand leaving their phones alone	.65	.04	.14
GSBP_8	Others seem like they are “in their own worlds” using their phones	.61	.11	.13
GSBP_9	Others seem anxious if their phones are not nearby	.58	-.01	.20
GSBP_10	Others pay attention to their phones rather than talking to me	-.07	.94	-.00
GSBP_11	Others would rather pay attention to their phones than talk to me	-.03	.83	.08
GSBP_12	Others seem like they get rid of boredom by paying attention to their phones instead of me	.14	.73	-.08
GSBP_13	Others seem like they feel content when they are paying attention to their phones instead of me	.14	.69	.00
GSBP_14	Others pay attention to their phones rather than focusing on me	.08	.64	.19
GSBP_15	Others seem like they get rid of stress by paying attention to their phones instead of me	.08	.60	.11
GSBP_16	Others seem like they feel good when they stop focusing on me and pay attention to their phones instead	.03	.58	.14
GSBP_17	Others shift their attention from me to their phones	.19	.52	.16

GSBP_18	I tell others that they interact with their phones too much .	.09	-.17	.87
GSBP_19	I have conflicts with others because they are using their phones	-.16	.09	.86
GSBP_20	I find myself thinking "I've had enough" when others are using their phones	.08	-.03	.73
GSBP_21	Others use their phones even though they know it irritates me	-.14	.30	.70
GSBP_22	Others seem like they get irritated if I ask them to get off their phones and talk to me	.01	.26	.59
	Unrotated Eigenvalues	15.92	1.65	1.02
	% Of variance accounted for following rotation	54.91	5.70	3.54

Appendix H.

Single Item Trait Empathy Scale

To what extent does the following statement describe you:

"I am an empathetic person,"

1 = Not very true of me to 5 = Very true of me

Appendix I.

Debrief

Thank you very much for taking part in this research study.

The study in which you just participated in was designed to investigate the implications of phubbing behaviour on one's empathetic ability. We hope that this research will contribute to the knowledge of communication, phubbing behaviour and empathy. Our research questions are:

1. How does a person's level of empathy influence their phubbing behaviour?
2. Why do we phub? Why do we allow others to phub us?
3. Has phubbing become a normative and accepted behaviour?
4. Does smartphone addiction make us more likely to phub?
5. Does being in a relationship make us more likely to phub?
6. Can we concentrate on our phone and develop meaningful relationships at the same time?

If you have questions about this study or you wish to have your data removed from the study, please contact me at the following e-mail address: N00110636@student.iadt.ie. We thank you sincerely for contributing and assure you that your data is confidential and anonymous, and, if published, the data will not be in any way identifiable as yours.

If you have been affected by the content of this study in any way, the organisations below may be of assistance:

Samaritans Ireland (01) 671 0071

Focus Ireland (01) 671 0071

Quantitative Results

Appendix J.

Multiple Regression - Model 1

```
REGRESSION
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING PAIRWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
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/NOORIGIN
/DEPENDENT SITES
/METHOD=ENTER Age Gender Total_GSP Total_GSBP
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS NORMPROB(ZRESID)
/CASEWISE PLOT(ZRESID) OUTLIERS(3)
/SAVE MAHAL COOK.
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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.

Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SITES /METHOD=ENTER Age Gender Total_GSP Total_GSBP /SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS NORMPROB(ZRESID) /CASEWISE PLOT(ZRESID) OUTLIERS(3) /SAVE MAHAL COOK.
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Variables Created or Modified	MAH_1	Mahalanobis Distance
	COO_1	Cook's Distance

Descriptive Statistics

	Mean	Std. Deviation	N
SITES	3.94	1.035	82
Age	2.524	1.1571	82
Gender	1.62	.488	82
Total_GSP	50.0122	16.78734	82
Total_GSBP	96.8293	24.20275	82

Correlations

		SITES	Age	Gender	Total_GSP	Total_GSBP
Pearson Correlation	SITES	1.000	.182	.321	-.411	-.211
	Age	.182	1.000	.202	-.326	-.177
	Gender	.321	.202	1.000	-.119	-.091
	Total_GSP	-.411	-.326	-.119	1.000	.395
	Total_GSBP	-.211	-.177	-.091	.395	1.000
Sig. (1-tailed)	SITES	.	.051	.002	.000	.028
	Age	.051	.	.034	.001	.056
	Gender	.002	.034	.	.144	.207
	Total_GSP	.000	.001	.144	.	.000
	Total_GSBP	.028	.056	.207	.000	.
N	SITES	82	82	82	82	82
	Age	82	82	82	82	82
	Gender	82	82	82	82	82
	Total_GSP	82	82	82	82	82
	Total_GSBP	82	82	82	82	82

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Total_GSBP, Gender, Age, Total_GSP ^b	.	Enter

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.495 ^a	.245	.206	.922

a. Predictors: (Constant), Total_GSBP, Gender, Age, Total_GSP

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.278	4	5.319	6.261	.000 ^b
	Residual	65.417	77	.850		
	Total	86.695	81			

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

b. Predictors: (Constant), Total_GSBP, Gender, Age, Total_GSP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.290	.668		6.420	.000	2.959	5.620					
	Age	.001	.095	.001	.007	.994	-.189	.190	.182	.001	.001	.864	1.157
	Gender	.580	.215	.274	2.701	.008	.153	1.008	.321	.294	.267	.954	1.048
	Total_GSP	-.022	.007	-.361	-3.209	.002	-.036	-.008	-.411	-.343	-.318	.775	1.290
	Total_GSBP	-.002	.005	-.044	-.407	.685	-.011	.007	-.211	-.046	-.040	.840	1.190

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Age	Gender	Total_GSP	Total_GSBP
1	1	4.659	1.000	.00	.01	.00	.00	.00
	2	.200	4.829	.00	.45	.01	.11	.02
	3	.079	7.690	.00	.33	.70	.09	.02
	4	.045	10.205	.01	.06	.03	.70	.59
	5	.018	16.106	.99	.16	.26	.10	.36

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Residuals Statistics^a

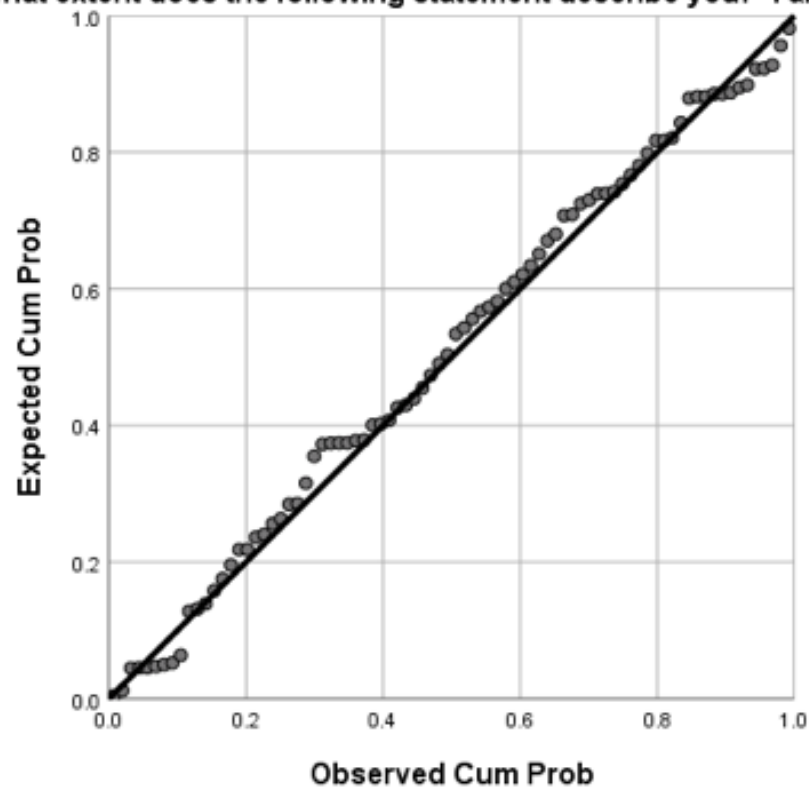
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.56	4.86	3.94	.513	82
Std. Predicted Value	-2.689	1.798	.000	1.000	82
Standard Error of Predicted Value	.145	.357	.222	.051	82
Adjusted Predicted Value	2.65	4.96	3.94	.515	82
Residual	-2.423	1.924	.000	.899	82
Std. Residual	-2.629	2.087	.000	.975	82
Stud. Residual	-2.695	2.158	-.002	1.008	82
Deleted Residual	-2.546	2.057	-.003	.960	82
Stud. Deleted Residual	-2.813	2.212	-.004	1.020	82
Mahal. Distance	1.026	11.161	3.951	2.305	82
Cook's Distance	.000	.083	.014	.020	82
Centered Leverage Value	.013	.138	.049	.028	82

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Charts

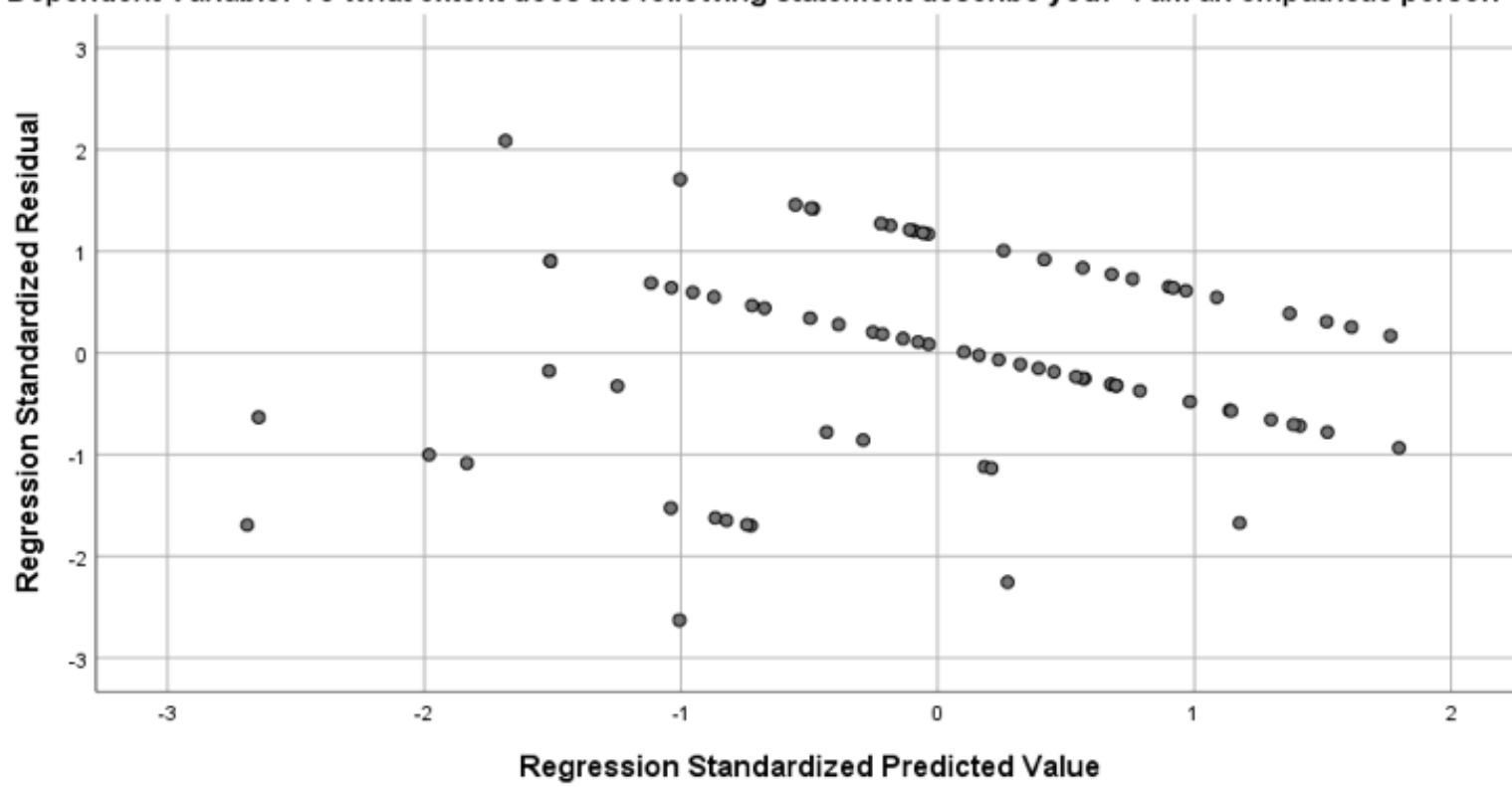
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"



Scatterplot

Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"



Appendix K.

Multiple Regression - Model 2

```

REGRESSION
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING PAIRWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT SITES
/METHOD=ENTER Age Gender Total_GSBP_FI Total_GSBP_IC Total_GSBP_PN Total_GSP_PA Total_GSP_SI
    Total_GSP_IC Total_GSP_NP
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS NORMPROB(ZRESID)
/CASEWISE PLOT(ZRESID) OUTLIERS(3)
/SAVE MAHAL COOK.
    
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Regression

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.

Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SITES /METHOD=ENTER Age Gender Total_GSBP_FI Total_GSBP_IC Total_GSBP_PN Total_GSP_PA Total_GSP_SI Total_GSP_IC Total_GSP_NP /SCATTERPLOT=(*ZRESID,*ZPRED) /RESIDUALS NORMPROB(ZRESID) /CASEWISE PLOT(ZRESID) OUTLIERS(3) /SAVE MAHAL COOK.
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Variables Created or Modified	MAH_2	Mahalanobis Distance
	COO_2	Cook's Distance

Descriptive Statistics

	Mean	Std. Deviation	N
To what extent does the following statement describe you: "I am an empathetic person"	3.94	1.035	82
Age	2.524	1.1571	82
Gender	1.62	.488	82
Total_GSBP_FI	32.7683	10.09865	82
Total_GSBP_IC	18.1341	8.14947	82
Total_GSBP_PN	45.9268	9.53846	82
Total_GSP_PA	13.5854	4.61867	82
Total_GSP_SI	10.2683	5.51999	82
Total_GSP_IC	10.5366	5.51809	82
Total_GSP_NP	15.9146	5.76751	82

Correlations

		SITES	Age	Gender	Total_ GSBP_FI	Total_ GSBP_IC	Total_ GSBP_PN	Total_ GSP_PA	Total_ GSP_SI	Total_ GSP_IC	Total_ GSP_NP
Pearson Correlation	SITES	1.000	.182	.321	-.246	-.226	-.083	-.225	-.559	-.386	-.257
	Age	.182	1.000	.202	-.127	-.082	-.245	-.518	-.218	-.151	-.250
	Gender	.321	.202	1.000	-.078	-.012	-.139	.056	-.260	-.190	-.025
	Total_ GSBP_FI	-.246	-.127	-.078	1.000	.715	.687	.345	.379	.376	.081
	Total_ GSBP_IC	-.226	-.082	-.012	.715	1.000	.492	.351	.333	.471	.164
	Total_ GSBP_PN	-.083	-.245	-.139	.687	.492	1.000	.380	.175	.175	.088
	Total_ GSP_PA	-.225	-.518	.056	.345	.351	.380	1.000	.497	.513	.394
	Total_ GSP_SI	-.559	-.218	-.260	.379	.333	.175	.497	1.000	.689	.480
	Total_ GSP_IC	-.386	-.151	-.190	.376	.471	.175	.513	.689	1.000	.510
	Total_ GSP_NP	-.257	-.250	-.025	.081	.164	.088	.394	.480	.510	1.000
Sig. (1-tailed)	SITES	.	.051	.002	.013	.021	.229	.021	.000	.000	.010
	Age	.051	.	.034	.128	.231	.013	.000	.025	.088	.012
	Gender	.002	.034	.	.243	.458	.107	.310	.009	.044	.413
	Total_ GSBP_FI	.013	.128	.243	.	.000	.000	.001	.000	.000	.234
	Total_ GSBP_IC	.021	.231	.458	.000	.	.000	.001	.001	.000	.070
	Total_ GSBP_PN	.229	.013	.107	.000	.000	.	.000	.058	.058	.216
	Total_ GSP_PA	.021	.000	.310	.001	.001	.000	.	.000	.000	.000
	Total_ GSP_ SI	.000	.025	.009	.000	.001	.058	.000	.	.000	.000
	Total_ GSP_ IC	.000	.088	.044	.000	.000	.058	.000	.000	.	.000
	Total_ GSP_ NP	.010	.012	.413	.234	.070	.216	.000	.000	.000	.
N	SITES	82	82	82	82	82	82	82	82	82	82

Age	82	82	82	82	82	82	82	82	82	82	82
Gender	82	82	82	82	82	82	82	82	82	82	82
Total_GSBP_FI	82	82	82	82	82	82	82	82	82	82	82
Total_GSBP_IC	82	82	82	82	82	82	82	82	82	82	82
Total_GSBP_PN	82	82	82	82	82	82	82	82	82	82	82
Total_GSP_PA	82	82	82	82	82	82	82	82	82	82	82
Total_GSP_SI	82	82	82	82	82	82	82	82	82	82	82
Total_GSP_IC	82	82	82	82	82	82	82	82	82	82	82
Total_GSP_NP	82	82	82	82	82	82	82	82	82	82	82

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Total_GSP_NP, Gender, Total_GSBP_FI, Age, Total_GSP_SI, Total_GSP_PA, Total_GSBP_IC, Total_GSBP_PN, Total_GSP_IC ^b	.	Enter

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.601 ^a	.361	.282	.877

a. Predictors: (Constant), Total_GSP_NP, Gender, Total_GSBP_FI, Age, Total_GSP_SI, Total_GSP_PA, Total_GSBP_IC, Total_GSBP_PN, Total_GSP_IC

b. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.340	9	3.482	4.529	.000 ^b
	Residual	55.355	72	.769		
	Total	86.695	81			

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

b. Predictors: (Constant), Total_GSP_NP, Gender, Total_GSBP_FI, Age, Total_GSP_SI, Total_GSP_PA, Total_GSBP_IC, Total_GSBP_PN, Total_GSP_IC

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.772	.775		4.865	.000	2.226	5.317					
	Age	.065	.107	.073	.610	.544	-.148	.279	.182	.072	.057	.619	1.615
	Gender	.408	.235	.193	1.736	.087	-.060	.877	.321	.200	.164	.721	1.386
	Total_GSBP_FI	-.010	.018	-.098	-.572	.569	-.045	.025	-.246	-.067	-.054	.300	3.333
	Total_GSBP_IC	-.010	.018	-.081	-.558	.578	-.047	.026	-.226	-.066	-.053	.426	2.346
	Total_GSBP_PN	.014	.016	.131	.915	.363	-.017	.045	-.083	.107	.086	.429	2.330
	Total_GSP_PA	.011	.033	.048	.325	.746	-.055	.077	-.225	.038	.031	.403	2.480
	Total_GSP_SI	-.092	.027	-.491	-3.352	.001	-.147	-.037	-.559	-.367	-.316	.412	2.424
	Total_GSP_IC	.008	.029	.043	.278	.782	-.050	.066	-.386	.033	.026	.371	2.697
	Total_GSP_NP	-.005	.021	-.030	-.251	.802	-.048	.037	-.257	-.030	-.024	.631	1.585

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions										
				(Constant)	Age	Gender	Total_GSBP_FI	Total_GSBP_IC	Total_GSBP_PN	Total_GSBP_PA	Total_GSBP_SI	Total_GSBP_IC	Total_GSBP_NP	
1	1	9.078	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.367	4.974	.00	.11	.02	.00	.00	.00	.00	.00	.05	.04	.00
	3	.165	7.421	.00	.15	.00	.02	.10	.01	.01	.01	.08	.04	.03
	4	.146	7.878	.00	.12	.06	.01	.11	.00	.04	.01	.03	.03	.08
	5	.077	10.841	.00	.00	.03	.02	.09	.02	.00	.42	.29	.08	.08
	6	.061	12.172	.00	.00	.20	.01	.01	.02	.09	.03	.08	.57	.08
	7	.049	13.547	.01	.02	.22	.01	.26	.05	.06	.29	.25	.06	.06
	8	.029	17.669	.00	.29	.28	.19	.25	.00	.53	.00	.22	.01	.01
	9	.017	23.128	.34	.27	.00	.48	.18	.07	.24	.06	.03	.17	.17
	10	.010	30.639	.64	.04	.18	.26	.00	.83	.03	.07	.02	.00	.00

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

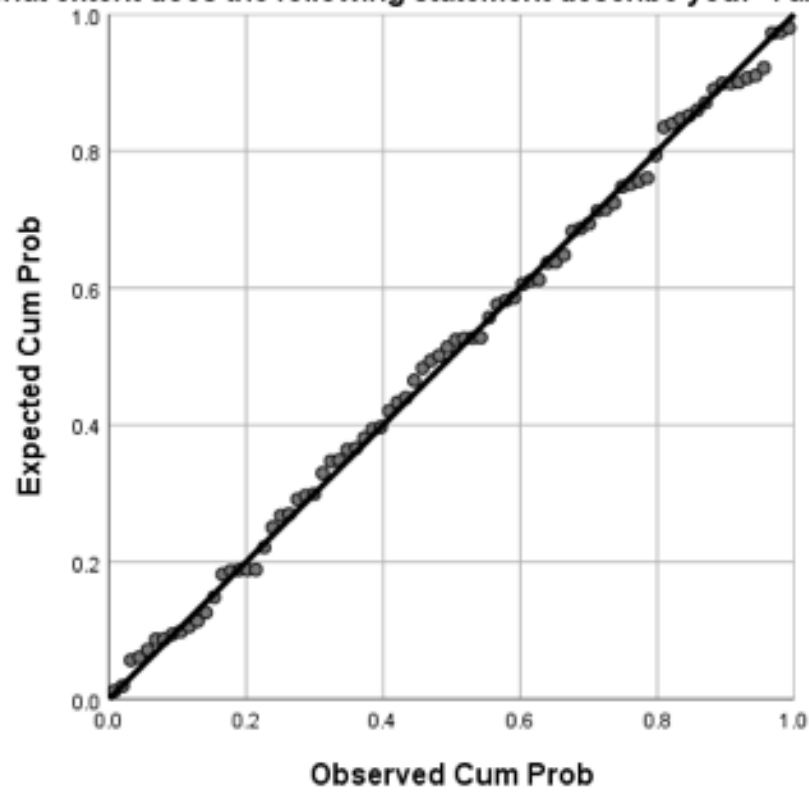
Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.95	4.94	3.94	.622	82
Std. Predicted Value	-3.203	1.608	.000	1.000	82
Standard Error of Predicted Value	.202	.476	.301	.059	82
Adjusted Predicted Value	1.94	4.92	3.95	.630	82
Residual	-2.000	1.800	.000	.827	82
Std. Residual	-2.281	2.053	.000	.943	82
Stud. Residual	-2.502	2.150	-.003	1.011	82
Deleted Residual	-2.407	2.025	-.006	.952	82
Stud. Deleted Residual	-2.601	2.207	-.004	1.023	82
Mahal. Distance	3.332	22.928	8.890	3.927	82
Cook's Distance	.000	.128	.015	.023	82
Centered Leverage Value	.041	.283	.110	.048	82

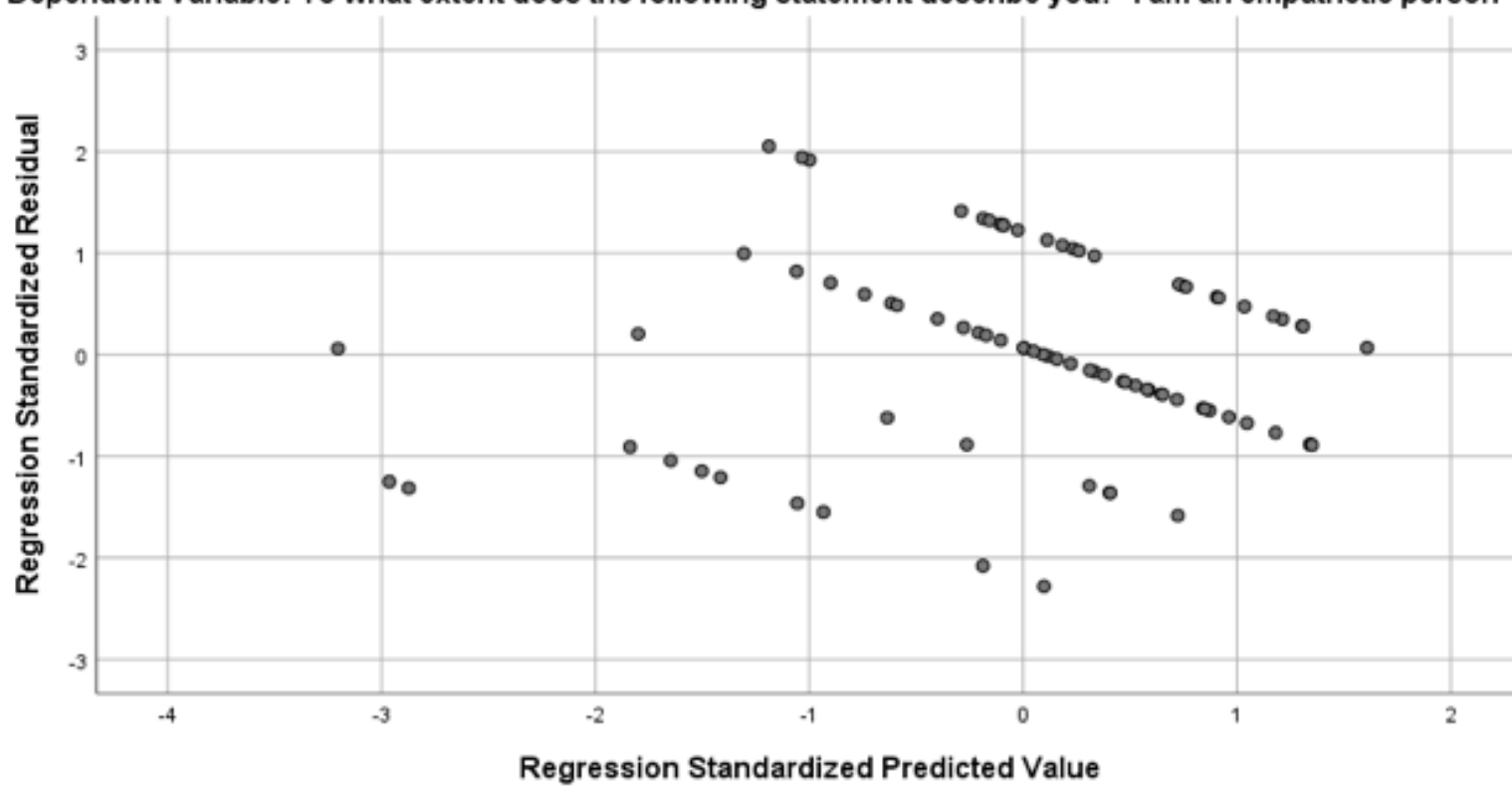
a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Charts

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"



Scatterplot
Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"



Appendix L.

Multiple Regression - Model 3

```
REGRESSION
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/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
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/NOORIGIN
/DEPENDENT SITES
/METHOD=ENTER Age Gender Total_GSBP_FI Total_GSBP_IC Total_GSBP_PN Total_GSP_PA Total_GSP_SI
    Total_GSP_IC Total_GSP_NP Phubbed_another_person_before Been_Phubbed_Before
    Howmuchtimedoyouthinkyouspendonyourphonedaily
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/RESIDUALS NORMPROB(ZRESID)
/CASEWISE PLOT(ZRESID) OUTLIERS(3)
/SAVE MAHAL COOK.
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	N of Rows in Working Data File	82
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.
Syntax	<pre>REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SITES /METHOD=ENTER Age Gender Total_GSBP_FI Total_GSBP_IC Total_GSBP_PN Total_GSP_PA Total_GSP_SI Total_GSP_IC Total_GSP_NP Phubbed_another_person_before Been_Phubbed_Before Howmuchtimedoyouthinkyouspendonyourphonedaily</pre>	

		/SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS NORMPROB(ZRESID) /CASEWISE PLOT(ZRESID) OUTLIERS(3) /SAVE MAHAL COOK.
Resources	Processor Time	00:00:00.69
	Elapsed Time	00:00:01.00
	Memory Required	16144 bytes
	Additional Memory Required for Residual Plots	376 bytes
Variables Created or Modified	MAH_3	Mahalanobis Distance
	COO_3	Cook's Distance

Descriptive Statistics

	Mean	Std. Deviation	N
SITES	3.94	1.035	82
Age	2.524	1.1571	82
Gender	1.62	.488	82
Total_GSBP_FI	32.7683	10.09865	82
Total_GSBP_IC	18.1341	8.14947	82
Total_GSBP_PN	45.9268	9.53846	82
Total_GSP_PA	13.5854	4.61867	82
Total_GSP_SI	10.2683	5.51999	82
Total_GSP_IC	10.5366	5.51809	82
Total_GSP_NP	15.9146	5.76751	82
Phubbed another person before	1.0732	.26202	82
Been phubbed before	1.0122	.11043	82
Time_SmartphoneUse	2.67	.754	82

Correlations

	SITES	Age	Gender	Total_GSBP_FI	Total_GSBP_IC	Total_GSBP_PN	Total_GSP_PA	Total_GSP_SI	Total_GSP_IC	Total_GSP_NP	Phubbed before	Been phubbed before	Smartphone Use	
Pearson Correlation	SITES	1.000	.182	.321	-.246	-.226	-.083	-.225	-.559	-.386	-.257	.062	.007	.085
	Age	.182	1.000	.202	-.127	-.082	-.245	-.518	-.218	-.151	-.250	.035	-.051	-.252
	Gender	.321	.202	1.000	-.078	-.012	-.139	.056	-.260	-.190	-.025	-.071	.087	.228
	Total_GSBP_FI	-.246	-.127	-.078	1.000	.715	.687	.345	.379	.376	.081	.058	.047	.021
	Total_GSBP_IC	-.226	-.082	-.012	.715	1.000	.492	.351	.333	.471	.164	.065	-.043	.114
	Total_GSBP_PN	-.083	-.245	-.139	.687	.492	1.000	.380	.175	.175	.088	-.037	.048	.079
	Total_GSP_PA	-.225	-.518	.056	.345	.351	.380	1.000	.497	.513	.394	-.087	.034	.290
	Total_GSP_SI	-.559	-.218	-.260	.379	.333	.175	.497	1.000	.689	.480	.012	.055	.001
	Total_GSP_IC	-.386	-.151	-.190	.376	.471	.175	.513	.689	1.000	.510	-.096	-.112	.188
	Total_GSP_NP	-.257	-.250	-.025	.081	.164	.088	.394	.480	.510	1.000	.021	.060	.399
	Phubbed before	.062	.035	-.071	.058	.065	-.037	-.087	.012	-.096	.021	1.000	.395	.061
	Been phubbed before	.007	-.051	.087	.047	-.043	.048	.034	.055	-.112	.060	.395	1.000	.049
	Time_SmartphoneUse	.085	-.252	.228	.021	.114	.079	.290	.001	.188	.399	.061	.049	1.000
	Sig. (1-tailed)	SITES	.	.051	.002	.013	.021	.229	.021	.000	.000	.010	.289	.477
Age		.051	.	.034	.128	.231	.013	.000	.025	.088	.012	.378	.326	.011
Gender		.002	.034	.	.243	.458	.107	.310	.009	.044	.413	.264	.220	.020
Total_GSBP_FI		.013	.128	.243	.	.000	.000	.001	.000	.000	.234	.303	.338	.427
Total_GSBP_IC		.021	.231	.458	.000	.	.000	.001	.001	.000	.070	.282	.351	.155
Total_GSBP_PN		.229	.013	.107	.000	.000	.	.000	.058	.058	.216	.370	.335	.240
Total_GSP_PA		.021	.000	.310	.001	.001	.000	.	.000	.000	.000	.219	.380	.004
Total_GSP_SI		.000	.025	.009	.000	.001	.058	.000	.	.000	.000	.458	.311	.497
Total_GSP_IC		.000	.088	.044	.000	.000	.058	.000	.000	.	.000	.196	.158	.045
Total_GSP_NP		.010	.012	.413	.234	.070	.216	.000	.000	.000	.	.427	.297	.000
Phubbed before		.289	.378	.264	.303	.282	.370	.219	.458	.196	.427	.	.000	.293
Been phubbed before		.477	.326	.220	.338	.351	.335	.380	.311	.158	.297	.000	.	.332
Time_SmartphoneUse		.225	.011	.020	.427	.155	.240	.004	.497	.045	.000	.293	.332	.

N	SITES	82	82	82	82	82	82	82	82	82	82	82	82	82
	Age	82	82	82	82	82	82	82	82	82	82	82	82	82
	Gender	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSBP_FI	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSBP_IC	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSBP_PN	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSP_PA	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSP_SI	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSP_IC	82	82	82	82	82	82	82	82	82	82	82	82	82
	Total_GSP_NP	82	82	82	82	82	82	82	82	82	82	82	82	82
	Phubbed before	82	82	82	82	82	82	82	82	82	82	82	82	82
	Been phubbed before	82	82	82	82	82	82	82	82	82	82	82	82	82
	Time_Smart phoneUse	82	82	82	82	82	82	82	82	82	82	82	82	82

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Time_SmartphoneUse, Total_GSP_SI, Phubbed another person before, Total_GSBP_PN, Gender, Been phubbed before, Age, Total_GSBP_IC, Total_GSP_NP, Total_GSP_PA, Total_GSP_IC, Total_GSBP_FI ^b	.	Enter

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613 ^a	.376	.267	.886

a. Predictors: (Constant), Time_SmartphoneUse, Total_GSP_SI, Phubbed another person before, Total_GSBP_PN, Gender, Been phubbed before, Age, Total_GSBP_IC, Total_GSP_NP, Total_GSP_PA, Total_GSP_IC, Total_GSBP_FI

b. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.590	12	2.716	3.463	.001 ^b
	Residual	54.105	69	.784		
	Total	86.695	81			

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

b. Predictors: (Constant), Time_SmartphoneUse, Total_GSP_SI, Phubbed another person before, Total_GSBP_PN, Gender, Been phubbed before, Age, Total_GSBP_IC, Total_GSP_NP, Total_GSP_PA, Total_GSP_IC, Total_GSBP_FI

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.315	1.193		2.779	.007	.935	5.695					
	Age	.071	.110	.079	.642	.523	-.149	.291	.182	.077	.061	.595	1.680
	Gender	.419	.248	.198	1.689	.096	-.076	.915	.321	.199	.161	.660	1.516
	Total_GSBP_FI	-.011	.018	-.112	-.642	.523	-.047	.024	-.246	-.077	-.061	.296	3.373
	Total_GSBP_IC	-.013	.019	-.104	-.708	.481	-.051	.024	-.226	-.085	-.067	.416	2.405
	Total_GSBP_PN	.017	.016	.154	1.046	.299	-.015	.048	-.083	.125	.099	.419	2.387
	Total_GSP_PA	.010	.034	.046	.306	.761	-.057	.077	-.225	.037	.029	.401	2.494
	Total_GSP_SI	-.089	.029	-.475	-3.058	.003	-.147	-.031	-.559	-.345	-.291	.376	2.662
	Total_GSP_IC	.012	.031	.063	.387	.700	-.049	.073	-.386	.047	.037	.341	2.933
	Total_GSP_NP	-.012	.023	-.066	-.516	.608	-.058	.034	-.257	-.062	-.049	.550	1.818
	Phubbed before	.459	.429	.116	1.070	.288	-.397	1.315	.062	.128	.102	.766	1.305
	Been phubbed before	-.245	1.010	-.026	-.243	.809	-2.259	1.769	.007	-.029	-.023	.779	1.284
	Time_Smartphone Use	.079	.160	.057	.493	.623	-.240	.397	.085	.059	.047	.668	1.497

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Collinearity Diagnostics ^a

Model	Dimension	Eigen value	Condition Index	Variance Proportions													
				(Constant)	Age	Gender	Total_GSBP_FI	Total_GSBP_IC	Total_GSBP_PN	Total_GSP_PA	Total_GSP_SI	Total_GSP_IC	Total_GSP_NP	Phubbed before	Been phubbed before	Time_Phone Use	
1	1	11.897	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.398	5.470	.00	.07	.01	.00	.00	.00	.00	.00	.05	.04	.00	.00	.00	.00
	3	.177	8.193	.00	.23	.01	.00	.03	.00	.00	.02	.03	.03	.02	.00	.00	.04
	4	.164	8.511	.00	.06	.00	.03	.16	.01	.00	.00	.05	.02	.05	.00	.00	.00
	5	.097	11.092	.00	.02	.05	.01	.05	.01	.00	.00	.18	.15	.02	.08	.01	.04
	6	.072	12.848	.00	.00	.23	.00	.03	.00	.00	.11	.09	.01	.13	.09	.00	.05
	7	.051	15.209	.00	.00	.09	.00	.15	.01	.00	.05	.14	.37	.36	.03	.00	.02
	8	.046	16.008	.00	.06	.11	.05	.13	.10	.00	.00	.04	.01	.13	.27	.00	.00
	9	.035	18.381	.00	.00	.00	.02	.01	.00	.00	.13	.30	.03	.22	.07	.00	.73
	10	.029	20.361	.00	.35	.30	.14	.19	.00	.00	.45	.02	.28	.00	.00	.00	.09
	11	.018	25.632	.07	.14	.00	.39	.25	.04	.00	.15	.02	.01	.04	.23	.11	.02
	12	.011	33.612	.03	.00	.18	.35	.00	.76	.00	.07	.09	.03	.02	.21	.19	.00
	13	.005	50.770	.90	.06	.00	.02	.00	.09	.00	.00	.00	.03	.00	.01	.68	.01

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Residuals Statistics ^a

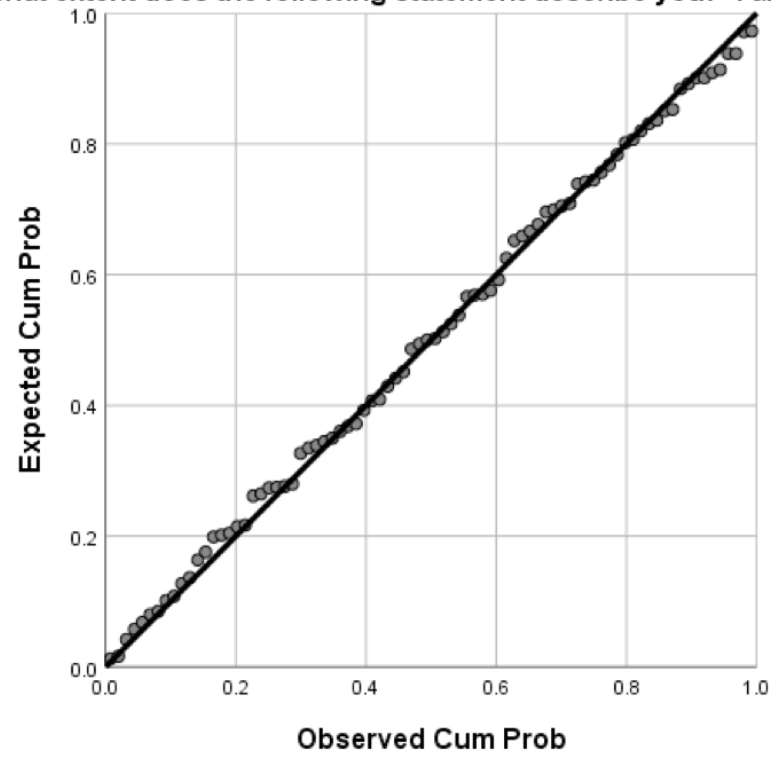
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.85	5.01	3.94	.634	82
Std. Predicted Value	-3.290	1.693	.000	1.000	82
Standard Error of Predicted Value	.217	.886	.341	.092	82
Adjusted Predicted Value	1.82	5.23	3.94	.662	81
Residual	-1.985	1.699	.000	.817	82
Std. Residual	-2.242	1.919	.000	.923	82
Stud. Residual	-2.466	2.114	-.004	1.015	81
Deleted Residual	-2.402	2.062	-.007	.986	81
Stud. Deleted Residual	-2.564	2.170	-.005	1.028	81
Mahal. Distance	3.865	80.012	11.854	9.055	82
Cook's Distance	.000	.154	.016	.027	81
Centered Leverage Value	.048	.988	.146	.112	82

a. Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"

Charts

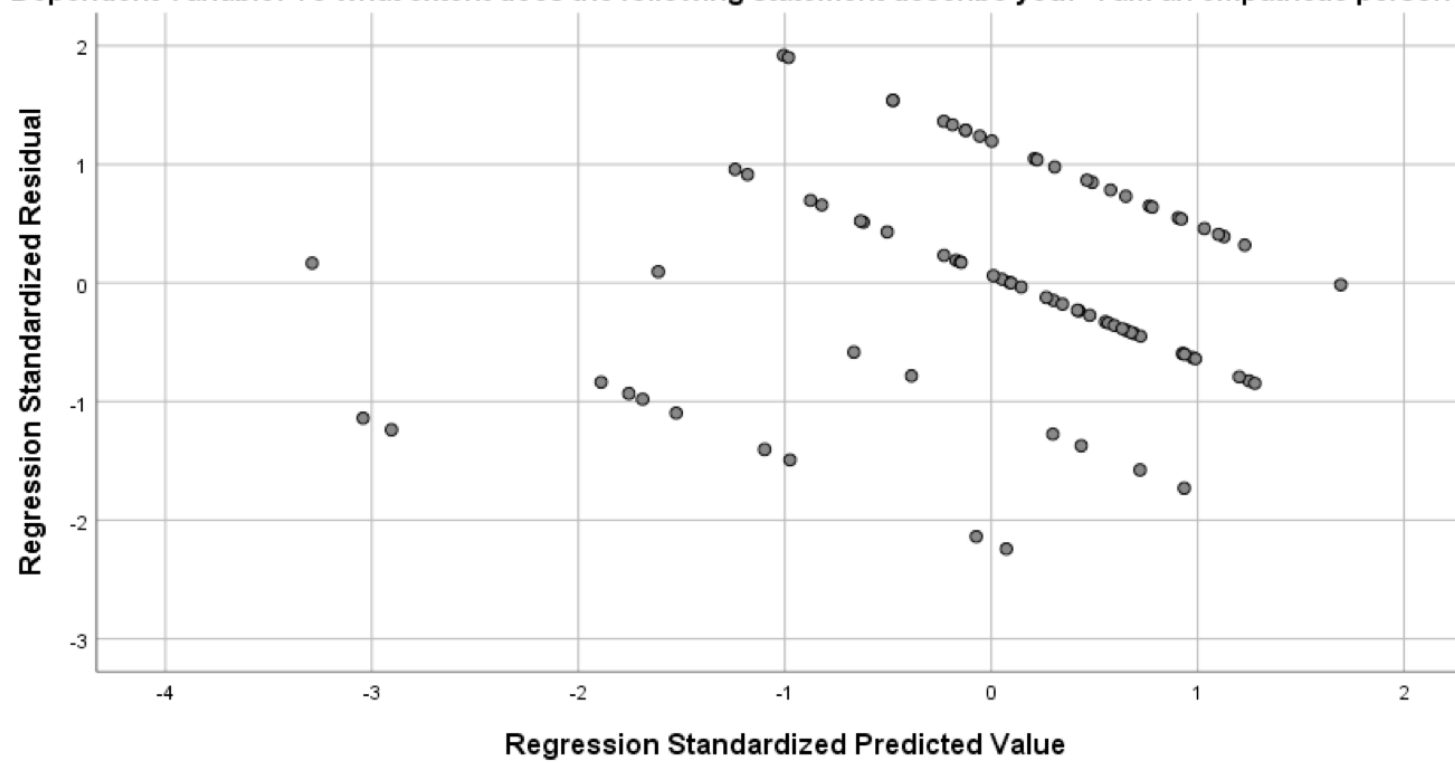
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"



Scatterplot

Dependent Variable: To what extent does the following statement describe you: "I am an empathetic person"



Appendix M.

Multiple Regression - Model 4

```

REGRESSION
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING PAIRWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Total_GSP
/METHOD=ENTER Total_GSBP SITES Age Gender Howmuchtimedoyouthinkyouspendonyourphonedaily
    Been_Phubbed_Before Phubbed_another_person_before
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS NORMPROB(ZRESID)
/CASEWISE PLOT(ZRESID) OUTLIERS(3)
/SAVE MAHAL COOK.
    
```

Regression

Notes

Output Created		15-APR-2019 21:11:28
Comments		
Input	Data	/Users/newswhip/Downloads/Data Set - clean.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	82
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.
Syntax	REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Total_GSP	

		/METHOD=ENTER Total_GSBP SITES Age Gender Howmuchtimedoyouthinkyou spendonyourp honedaily Been_Phubbed_Before Phubbed_another_person_before /SCATTERPLOT=(*ZRESID,*ZPRED) /RESIDUALS NORMPROB(ZRESID) /CASEWISE PLOT(ZRESID) OUTLIERS(3) /SAVE MAHAL COOK.
Resources	Processor Time	00:00:00.51
	Elapsed Time	00:00:00.00
	Memory Required	9408 bytes
	Additional Memory Required for Residual Plots	456 bytes
Variables Created or Modified	MAH_4	Mahalanobis Distance
	COO_4	Cook's Distance

Descriptive Statistics

	Mean	Std. Deviation	N
Total_GSP	50.0122	16.78734	82
Total_GSBP	96.8293	24.20275	82
SITES	3.94	1.035	82
Age	2.524	1.1571	82
Gender	1.62	.488	82
Time_SmartphoneUse	2.67	.754	82
Been phubbed before	1.0122	.11043	82
Phubbed another person before	1.0732	.26202	82

Correlations

		Total_GSP	Total_GSBP	SITES	Age	Gender	Time_SmartphoneUse	Been phubbed before	Phubbed before
Pearson Correlation	Total_GSP	1.000	.395	-.411	-.326	-.119	.271	.013	-.039
	Total_GSBP	.395	1.000	-.211	-.177	-.091	.078	.024	.031
	SITES	-.411	-.211	1.000	.182	.321	.085	.007	.062
	Age	-.326	-.177	.182	1.000	.202	-.252	-.051	.035
	Gender	-.119	-.091	.321	.202	1.000	.228	.087	-.071
	Time_SmartphoneUse	.271	.078	.085	-.252	.228	1.000	.049	.061
	Been phubbed before	.013	.024	.007	-.051	.087	.049	1.000	.395
	Phubbed before	-.039	.031	.062	.035	-.071	.061	.395	1.000
	Sig. (1-tailed)	Total_GSP	.	.000	.000	.001	.144	.007	.453
Total_GSBP		.000	.	.028	.056	.207	.243	.416	.390
SITES		.000	.028	.	.051	.002	.225	.477	.289
Age		.001	.056	.051	.	.034	.011	.326	.378
Gender		.144	.207	.002	.034	.	.020	.220	.264
Time_SmartphoneUse		.007	.243	.225	.011	.020	.	.332	.293
Been phubbed before		.453	.416	.477	.326	.220	.332	.	.000
Phubbed before		.362	.390	.289	.378	.264	.293	.000	.
N		Total_GSP	82	82	82	82	82	82	82
	Total_GSBP	82	82	82	82	82	82	82	82
	SITES	82	82	82	82	82	82	82	82
	Age	82	82	82	82	82	82	82	82
	Gender	82	82	82	82	82	82	82	82
	Time_SmartphoneUse	82	82	82	82	82	82	82	82
	Been phubbed before	82	82	82	82	82	82	82	82
	Phubbed before	82	82	82	82	82	82	82	82

Variables Entered/Removed ^a

Model	Variables Entered	Variables Removed	Method
1	Phubbed another person before, Total_GSBP, Time_SmartphoneUse, To what extent does the following statement describe you: "I am an empathetic person", Age, Been phubbed before, Gender ^b	.	Enter

a. Dependent Variable: Total_GSP

b. All requested variables entered.

Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.606 ^a	.367	.307	13.96993

a. Predictors: (Constant), Phubbed another person before, Total_GSBP, Time_SmartphoneUse, To what extent does the following statement describe you: "I am an empathetic person", Age, Been phubbed before, Gender

b. Dependent Variable: Total_GSP

ANOVA ^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8385.216	7	1197.888	6.138	.000 ^b
	Residual	14441.772	74	195.159		
	Total	22826.988	81			

a. Dependent Variable: Total_GSP

b. Predictors: (Constant), Phubbed another person before, Total_GSBP, Time_SmartphoneUse, To what extent does the following statement describe you: "I am an empathetic person", Age, Been phubbed before, Gender

Coefficients ^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	46.469	18.257		2.545	.013	10.091	82.847					
	Total_GSBP	.192	.067	.277	2.889	.005	.060	.325	.395	.318	.267	.930	1.076
	SITES	-5.502	1.634	-.339	-3.368	.001	-8.758	-2.247	-.411	-.365	-.311	.843	1.186
	Age	-2.163	1.476	-.149	-1.465	.147	-5.105	.779	-.326	-.168	-.135	.825	1.211
	Gender	-.474	3.600	-.014	-.132	.896	-7.648	6.699	-.119	-.015	-.012	.781	1.281
	Time_PhoneUse	5.475	2.244	.246	2.440	.017	1.004	9.946	.271	.273	.226	.841	1.189
	Been phubbed before	.982	15.531	.006	.063	.950	-29.963	31.928	.013	.007	.006	.819	1.221
	Phubbed before	-2.588	6.587	-.040	-.393	.696	-15.713	10.538	-.039	-.046	-.036	.809	1.237

a. Dependent Variable: Total_GSP

Collinearity Diagnostics ^a

Model	Dimension	Eigen value	Condition Index	Variance Proportions								
				(Constant)	Total_GSBP	SITES	Age	Gender	Time_PhoneUse	Been phubbed before	Phubbed before	
1	1	7.559	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.177	6.530	.00	.02	.00	.61	.00	.05	.00	.00	.00
	3	.089	9.219	.00	.13	.07	.04	.29	.05	.00	.00	.07
	4	.060	11.193	.00	.27	.23	.06	.10	.02	.00	.00	.21
	5	.049	12.401	.00	.16	.19	.17	.06	.67	.00	.00	.03
	6	.042	13.485	.00	.05	.36	.05	.49	.14	.00	.00	.25
	7	.019	19.812	.09	.29	.08	.02	.05	.03	.21	.21	.39
	8	.005	40.167	.90	.08	.05	.05	.01	.04	.78	.78	.05

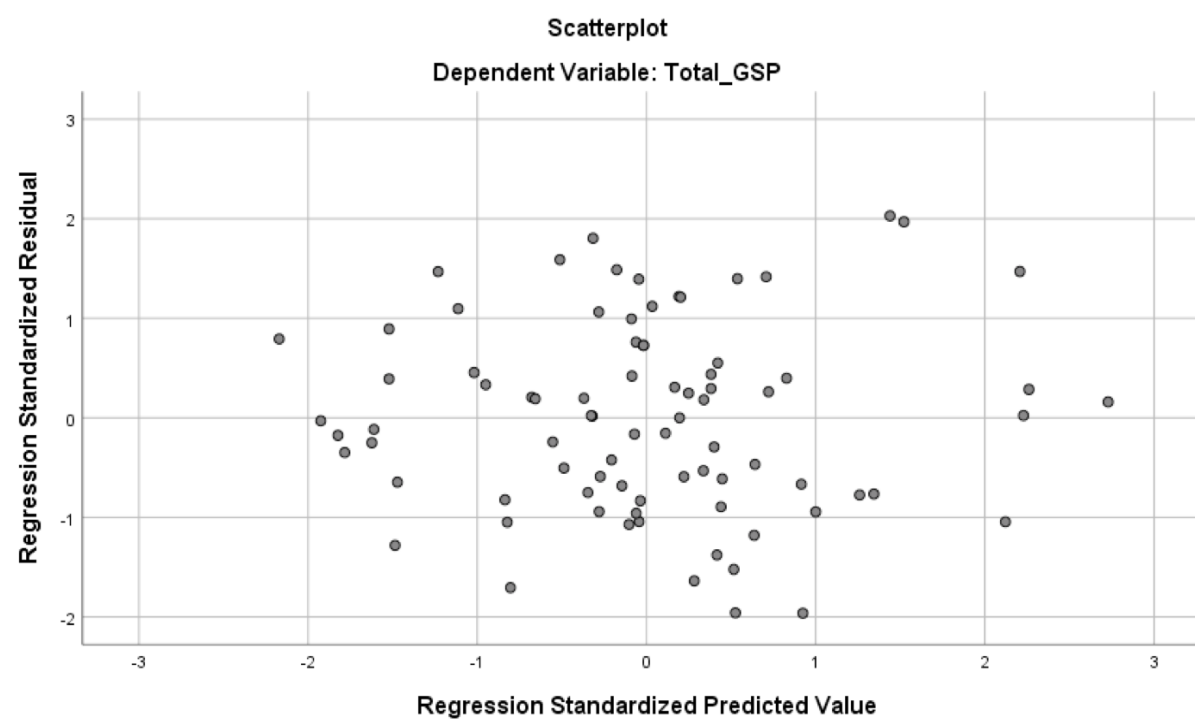
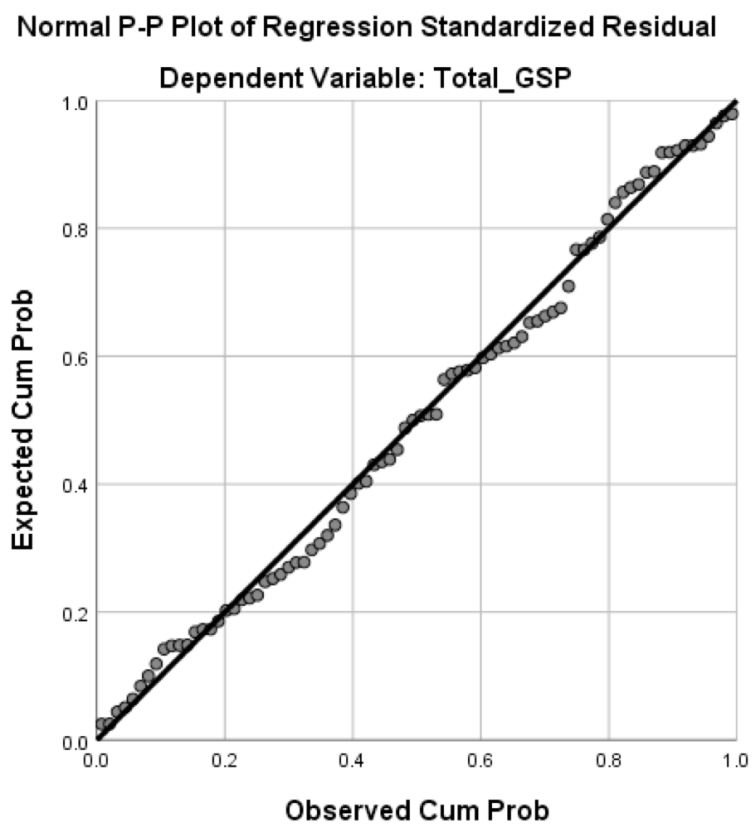
a. Dependent Variable: Total_GSP

Residuals Statistics ^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	27.9250	77.7716	50.0122	10.17454	82
Std. Predicted Value	-2.171	2.728	.000	1.000	82
Standard Error of Predicted Value	2.184	13.970	4.071	1.579	82
Adjusted Predicted Value	26.9131	77.4043	50.0273	10.38805	81
Residual	-27.41535	28.34493	.00000	13.35266	82
Std. Residual	-1.962	2.029	.000	.956	82
Stud. Residual	-2.274	2.120	-.001	1.015	81
Deleted Residual	-36.89938	30.94951	-.03969	14.98753	81
Stud. Deleted Residual	-2.342	2.173	-.001	1.025	81
Mahal. Distance	.992	80.012	6.915	9.211	82
Cook's Distance	.000	.225	.015	.030	81
Centered Leverage Value	.012	.988	.085	.114	82

a. Dependent Variable: Total_GSP

Charts



Qualitative Thematic Analysis

Appendix N.

2. How did being phubbed make you feel?

Ignored/unimportant
Ignored. Not important
Didn't really take any notice to it
Ignored
Annoyed
Annoyed, frustrated
It's pretty acceptable nowadays. Unless given an excuse or valid reason, I generally would feel invisible or like the person is being quite rude.
Undervalued and unrespected
Like I am boring the other person
Depends on the situation. I do it myself when I'm on the bus, but when I make plans to meet up with someone else to go for dinner or something, it's frustrating to see them on their phone when it's not related to our conversation.
Annoyed
Ignored but sometimes it doesn't bother me
SOMETIMES I CARE , SOMETIMES I DON'T
Irritated
Inadequate
Annoyed
Frustrated and under appreciated
Like it was a normal behaviour so I took out my phone and phubbed right back.
Frustrated
It felt normal
Unimportant, irritated
slightly annoyed
Impatient
Isolated
Annoyed
Irritated and ignored
Like the thing on their phone was more important
When someone is phubbing me, it is quite off putting. I really do not enjoy having conversations with the top of someone's head. I think a conversation is a two-way form of communication and when met with a phone to my face, it is very off-putting, irritating and causes great annoyance.
Ignored
It made me feel ignored, insignificant and irritated.
Ignored, offended, exasperated

Ignored
irritated
Excluded
Disrespected
I don't like it as I feel it is very rude, especially if the call is not important
Irritated
Annoyed
Annoyed
Annoyed
Isolated
Annoyed
I didn't notice it, but if I saw it now, I wouldn't mind if it was just a quick task, as this is often something I would catch myself doing, and it would not be an intentional snub
Left out, boring, uninteresting
Annoyed. It's like I was not important.
Less important
Unimportant
Annoyed at first - but definitely more likely to revenge phub them back to get even!
Insignificant and boring
Ignored
Irritated
Depends on the situation. Felt it was rude in a group situation if it was more than a quick message or time check. 1:1 it feels like they've not got time for you.
Annoyed
Insulted
Irritated
Annoyed
A bit annoying
Unimportant
Insignificant and boring
Disrespected
Mixed - sometimes I'm fine with it, other times it annoys me. It depends on the context of the situation (e.g if its group, its fine, if it's more personal, then annoying)
Less important than cat videos. At works it feels like you are the only one taking it seriously.
Ignored, boring
Dejected.
annoyed
Annoyed/Belittled
Unimportant
Dismissed, like they weren't taking what I had to say seriously
So typical today i barely notice anymore
Ignored
Bit ignored
I know 2 people who do it constantly so while it's insulting I'm over it at this stage. I call them out on it.

Uncomfortable. My boss is constantly on his phone in work especially during presentations. It makes me feel that he isn't paying attention and doesn't really care about what we're presenting.
Annoyed. If I take the time out of my day to spend with another person I would hope they would respect me enough to leave their phone alone.
My girlfriend phubs me all the time. She seems to have her phone glued to her hand. It's hard to tell where she stops and the phone begins. It gets really frustrating when I have to compete with the cyber relationships she has online.
Unimportant
Uncomfortable. I hate talking to the back of someone's phone.
Frustrated
Terrible. It's so rude to ignore the people you're with. I don't let anyone I'm with spend time on their phone around me as it doesn't help anyone
My students do it to me all the time. I don't think they know I can see them. It's disappointing to see the hours of planning put into each lesson go over their head as they spend more time trying to discreetly look at their phones under their tables.
disregarded
Lonely, ignored, forgotten

Appendix O.

3. How do you think the phubber (person phone snubbing you) felt?

Bad afterwards, but only if something is said. They can see no problem with it until you say something
Fine. Probably unaware of the impact on me
Didn't notice they did it
The need to source information or news
Unaffected
That it was a normal and natural thing to do.
They probably didn't feel any different
To be honest he was a bit of a sociopath so who knows
Fear of missing out on what's happening online. Obligated to respond to online conversations.
Distracted, not fully present, maybe bored.
Unaware
Don't know...it happens in such an incidental way
I DON'T THINK THEY ARE AWARE
I'd say they didn't even think about it
Oblivious
Unbothered
They weren't aware
Like they couldn't resist the impulse to phub
They probably didn't think about it. It's just something we all do
They didn't realise they were doing it
Unaware, anxious

unaware
Unaffected
More interested in what's on their screen
Uninterested in conversation
Bored or uncomfortable from what I was saying
Probably didn't notice much
I don't think they really noticed they were doing it. Phubbing has become such a normal practice that only if you catch someone doing it to you and highlight to them what they are doing, will they notice.
Awkward
The phubber was most likely completely oblivious to my feelings. They probably felt good that they were multi-tasking.
Oblivious. My Dad is a massive phubber, but I think it's a reflex of his to pull out his phone all the time rather than a conscious reaction
They didn't think anything of it
I don't think they realised what they were doing.
Not conscious about their behaviour
Preoccupied
not bothered
Oblivious to the fact I was annoyed
Distracted
Unphased
Didn't even realise
Indifferent
Ambivalent
I think people believe that others will understand the interruption because everybody is under similar levels of stress / time pressures.
They didn't notice/care
I don't think they felt anything. It's just second nature.
Unaware
Oblivious
Fine
I think they did it without even realising
Oblivious
Sometimes remorseless, in work spaces apologetic.
Probably didn't think about it.
Oblivious
Indifferent
It's normal today so I doubt they even gave it a second thought
Either bored or unaware
Didn't realize
Aware of what they were doing
I think they did it without even realising
Unaware of impact
Didn't notice, unless I brought it up!
I think they didn't realize what they were doing

bored, distracted
Disengaged with the interaction, though likely oblivious to the effect of their behaviour on me.
didn't really care
Indifferent
Didn't realise
That their phone was as important, if not more so, than our conversation
Doubt they noticed my feelings at all
Didn't notice
Oblivious
They think they're missing something by not checking their phone, but they aren't thinking of the people they are present with.
I don't think he knows he does it. I think it's easy to just check a notification and end up losing minutes staring at your phone.
I think most people don't really know they are doing it until I call the out on it. I don't think y generation has lost politeness, but it definitely is rude when someone is busy talking to someone else on their phone.
I think she sees the relationships she has with her friends through WhatsApp or Instagram as as important as ours. I don't think she understands the frustration I feel when I have to compete with her phone for her attentions.
Indifferent
Engaged they were having multiple conversations with different groups of people online
Unaware
My boss does it to me all the time in work and it's so horrible to watch someone ignore you as you're trying to discuss difficult topics with them. I don't think he knows he's doing it to me.
I think a lot of my students are very keyed into their social networks and spend hours and hours a day keeping their friends and acquaintances up to date on what they are doing. I like to think that they're not ignoring me personally but they can't help it.
It seems to have become such a normalised activity; you really need someone else to point it out to you to realise you're actually doing it
Apathetic

Appendix P

5. How did that make you feel?

Embarrassed and bad because you can do it without realising how rude it can be
Distracted from present company
Didn't notice I did anything wrong
Happy
Apologetic
Didn't think at the time but regretted it after.
Like I'm a hypocrite
I wouldn't
Guilty
I do it often on the bus or when I'm in public places and don't know anyone around me. It's something to occupy my time.
A little bad
Bad mannered
APOLOGETIC

It didn't
Inconsiderate
Guilty
Guilty - I apologise
Like I was hiding from that person
I probably felt bad if I realised but I can't say for sure
I didn't think twice
Guilty
oblivious
Aloof
Torn trying to pay attention to two things at once
Unaware of snubbing other person
Anti social and disrespectful
If I realised it had annoyed them, pretty bad. But a lot of the time it's pretty normal and doesn't effect the conversation much
I phubbed them because they were phubbing me. I make an active effort to not phub other people as I know it's irritating and annoying but when I am faced with looking at the back of their head, I'd rather talk to someone else on my phone that sit in silence being ignored.
Awkward
I probably didn't even notice myself doing it. (Although, I do sometimes apologise if I am talking one on one with someone and have to read a text or answer a call. Probably way more inclined to casually look at phone when in a group.)
I can't think of an exact instance but if I realised I was phubbing someone I would be disappointed in myself because I know how it negatively impacts me when I'm on the receiving end.
Awkward
I was angry at myself for doing it.
Uncomfortable
Distracted
it was a work call and needed to be taken - I apologised the to person I was talking to before taking the call
I didn't feel anything, I was focused on my phone activity
I try not get distracted
Unaware but guilty after the fact
In control
Indifferent
Didn't care
A tiny bit guilty but not much as I would have apologised and said that it was a quick task that i HAD to do at that time
You make excuses when you do it yourself. I felt a little bad.
Guilty
Stupid
Oblivious
Fine
Now I feel terrible as I know it has a name.
Guilty
Guilty, and annoyed at myself for losing self control
Guilty for checking the phone when it went off. I do try to put the phone out of sight because I've a habit of checking every time it buzzes:

I don't like it being done to me so I don't do it to other people
Good
I suppose I felt guilty?
Guilty
I apologized for taking call
Conscious
Now I feel terrible as I know it has a name.
Disrespectful
Embarrassed sometimes, as I didn't realise I was doing it - like an automatic response to a lull in conversation or something.
When I realized what I was doing, I tried to explain why it was important for me and apologized, I felt so bad to ignore the other person
When I realised what I was doing; guilty, selfish
Guilty.
Guilty
At the time, possibly didn't notice, but ignorant afterwards
Guilty
Felt guilty, and apologised
I was bored. But then i stopped myself because i knew it wasn't polite
Oops!
Depends, sometimes would feel guilty other times not
Awful once I realized I was doing it.
I think it depends on the situation. If I'm at a bus stop I don't really think it's a big problem but when around my friends I don't like getting sucked into my phone. It's hard enough to get one on one time with my friends and when I find myself looking at my phone when I'm with them I get annoyed at myself.
I don't like doing it. But when the people I'm with are all busy on their phones, it's hard to sit there and be ignored.
I don't like doing it but when she's talking to everyone else in the world through her phone rather than me, I sometimes resort to my phone.
Ignorant
It gets rid of boredom for a little while but after awhile you want to talk to a real human.
Not great.
At first, good as I was getting my own back. But I prefer to talk to people face to face. eye contact is really important for me when I'm talking to people. I think you miss a lot when you're having a digital conversation that you see in a face to face conversation.
I don't really think I do it very often but I annoy myself when I do it as I know how it feels from the other end.
Even I couldn't escape phubbing even though it annoys me when others do it to me
Hypocritical. I really don't like when people phone snub me, but often find myself phubbing when I am being ignored which just prolonged the ignore or be ignored cycle

Appendix Q

6. How do you think it made the phubbee (the person you were phubbing) feel?

Unimportant

Ignored and disrespected
Probably hurt, if they were more aware of it then I was
Lonely
Embarrassed
Frustrated.
Invisible, irritated
Terrible
Not listened to, not respected, as if they are boring me
Aw I'm so annoyed just thinking about it!
Unimportant
Not sure
DEPENDING ON THE PERSON/MOMNET IN TIME THEY MAY OR MAY NOT HAVE CARED
Who knows
Unsure
Annoyed
Sad and not appreciated
Like I wasn't interested in starting a conversation
Annoyed. Less likely to hang out again
They might not have felt important
Fine, they might not have cared
annoyed
Unimportant
Like I didn't want to spend time with them
Demeaned
Ignored
Again, depends on the situation. From very annoyed because they were mid conversation to didn't even notice because there was a lull in conversation
Honestly, I don't think they really noticed that they were doing it. It seems to have become such a normalised activity that you really need someone else to point t out to you to realise you're actually doing it.
Ignored
I'm guessing they didn't feel very good about it.
Terrible. Just completely overlooked
Disrespected
Ignored.
Disappointed
Disrespected
I believe they were ok as I explained it was work related
Annoyed
Not sure.
Unappreciated
Blanked
Insulted
Ignored and unimportant

I don't think it bothers people in similar situations
Probably, disappointed, let down, as I do when it happens to me
Annoyed
Ignored
Unimportant
Ignored
The same as I would feel insignificant and boring
Annoyed
Irritated
Ignored or I hadn't time for them
Same way it made me feel - awful!
Answer was no
I hate when it happens to me!
Annoyed
Hopefully they understood
Irrelevant
The same as I would feel insignificant and boring
Disrespected
Annoyed (people have told me that directly)
I think he was annoyed
Angry
That I wasn't engaged in the conversation.
annoyed, pissed off
Annoyed
Unimportant
Excluded and that I wasn't listening to them or paying attention
Annoyed?
I definitely won't be doing that again!
Left out ignored but depends
Like they were being ignored.
I think they probably didn't feel great. It's not nice to be ignored or excluded.
I think it's a cycle. Once one person takes out their phone, it trickles around the group. The safest option would be to ban all phones when in social situations. And maybe from college too. It gets really distracting when other people in my class are on their phone tapping away and I'm trying to concentrate on the lecture.
I don't think she even noticed.
Ignored
She spends more time online than anyone else on earth. I don't think she realises how annoying it is to be ignored when you spend ages and money getting somewhere to hang out in person
Don't think they noticed cause they were on their phone too!
Pissed off
Ignored
Very much snubbed
They were phubbing me at the time so I do think they took much notice. I suspect though that if they did break the eye contact they were intently holding with their phone and they looked up and saw me on my phone z b they would have considered

me ok with the behavior and continued. I really should have voiced my frustrations

Appendix R

7. Do you think phubbing (phone snubbing) is appropriate?

No
No
It depends on who you are talking to
Probably not
No
Generally no. In emergency situations it can be.
No
No, never
No
Depends on the situation. When you've specifically made plans to meet up with someone in person, I don't think it's appropriate. I think it's ok in public spaces when you're not with anyone you know.
No
It depends
NO
It depends on what you're using your phone for
No
No
No
Yes it is the perfect defence against forced conversation.
No
No
No
no
No
No
No people should communicate with words and be present with each other
No
Not when in the middle of something
No, I think it's quite rude to ignore someone if they have taken the time to spend time with you. I feel that it has become normalised though and acceptable for certain age groups.
Depends on the situation
Definitely not
Not at all, I think you should always excuse yourself if you HAVE to look at your phone but acknowledge it. There is no excuse for just gawking at it while in someone's company
Not really but it's a useful tool to get out of conversations
No, but I think it is begrudgingly accepted.
No

No
not in all cases, but if you have dependants.
If you think it might be important and you apologise for checking phone
depends on the person
No
No
No
No
I think it's normal to send a quick text or reply to a message; but to make an outgoing call would be a different matter, and inappropriate
No
This is a very "it depends" thing, I think. There are occasions when it's very casual and I don't think it really matters. Other times, the conversation is significant or demands concentration. In that case, it's very inappropriate.
No
No
depends
No ! We should be able to talk to each other.
No
Sometimes, to purposely avoid undesired interaction
No but it is an appropriate title for what it is
No
No
No
No
No
No
No ! We should be able to talk to each other.
No
Not really
No
No
No.
No
No
No
Not unless you are expecting an update on something important (eg family member is ill)
Only if necessary
No
No, not really. If you are looking something up but otherwise no
No it's thoughtless and rude
It depends on the situation. In small groups, no. In larger groups it seems to be more acceptable but still not great.
It depends on the location. I think it's ok to be on your phone when you're not ignoring someone else or making another person feel bad.
No, I really don't like it. It makes me feel so insignificant and like the time we're spending together isn't worth much.

Not really. It's becoming more accepted though even though it annoys people.
I think it's not appropriate but it seems to be coming more common
Depends where you are. If you're on your own, it's a good way to feel connection.
Not in work situations! If you are in work and trying to do your job as best as you can, everyone needs to be on the same page and respect the people they work with.
No
Not really. I know we use our phones everywhere so I there probably are instances when it's ok but I can't think of any. When you're on your own - but I guess that's not phubbing, that's just using your phone on your own.
No, especially if it hurts other people. We are a social species and need to spend time together talking, laughing and enjoying each other's company in order to build lasting relationships

Appendix S

Why do you think people phub?

Age	Why do you think people phub?
25-34	We spend too much time on our phones and can then neglect personal interactions that are vital
55-64	It's rude
18-24	people around my age probably wouldn't take notice of it as much as if we were talking to a older generation.
55-64	It's bad manners to ignore those in your company
55-64	It's very rude to do and bad mannered
25-34	The person may be needing to contact someone for an urgent reason.
25-34	It's antisocial and rude. Losing connections with real humans to have the illusion of gaining connections via phone.
25-34	It is exceptionally rude and immature.
25-34	Habit - board with other person- suffering from Stress or anxiety
25-34	If you have met up with someone in person, then they should be the priority, not your phone.
25-34	It may be important
55-64	It's rude
25-34	You're not full present in what you're doing
25-34	They could have been doing something important/urgent
25-34	We need to engage with real life around us
25-34	Value the person or people you are with.
25-34	Things on our phones can wait. We need to appreciate those in person more
25-34	Because sometimes I want to be alone and I don't want someone hijacking my alone time by striking up an awkward conversation that I don't want to be a part of.
25-34	Sometimes you forget that you don't have to constantly be multitasking
25-34	It replaces real human connection with a constructed version of reality because our phones allow us to access such a depth of information that people feel they are constantly missing out on something
25-34	It interrupts connection between people, concentration on a subject and the flow of conversation
55-64	creates negative feelings
25-34	it's embarrassing for the other person

18-24	Things on your phone can usually wait but the person is there right now
55-64	It's rude and disrespectful. Also stops people from being present in the moment and present with others.
18-24	Addicted to their phones or they're not comfortable with real human interactions
25-34	Low attention spans, force of habit to check your phone, sometimes because they're bored
25-34	They are preoccupied, busy
25-34	Social awkwardness
25-34	Awkwardness in conversation, boredom, nearly like muscle memory they don't even realise they're doing it sometimes, attempt to multitask.
25-34	I think it's a mindless activity and that people are not actively aware of what they are doing. Phone use is a habit and people can feel a draw to check their phone constantly. This seems to overrule standard courtesies now, maybe because it is so widespread and if everyone is doing it, then it must be acceptable
25-34	In a 1-1 conversation I don't think they know they are doing it, in a group its to get out of the conversation
25-34	I don't think they realise how rude they are being and are using their phone out of habit
35-44	Actually people don't pay attention about their behaviour when they are phubbing... On the other hand people are too much focused in mobile phones and socializing is in the background.
45-54	I think it's quite rude to ignore someone if they have taken the time to spend time with you. I feel that it has become normalised though and acceptable for certain age groups.
45-54	Mostly because they are preoccupied with online activities
45-54	They are distracted by the possibilities of their phone
25-34	Reduce stress levels. Distance between people. Lack of attention span.
25-34	Habit
35-44	Ignorance
25-34	Habit/boredom
35-44	Easily distracted and prone to compulsive phone use due to design features of phone and apps -notifications, haptics, bottomless scrolling, need for social approval, limitless access to information related to every thought or answer to every question that occurs to us, etc.
45-54	Time pressures
35-44	FOMO
25-34	Ignoring a phone's cry for attention is hard!
45-54	Addicted to their phones
18-24	Habit
25-34	Depends
25-34	Out of habit and due to feeling unconfident in the situation.
35-44	Busy lives. Hard to ignore your phone.
25-34	Addiction to smartphones, lack of awareness of how the other person feels.
18-24	Bad habit
55-64	They're hooked on social media
45-54	Shy
45-54	They are trying to get your information
25-34	No endurance, limited attention span
45-54	Lack of manners. I think it depends on the generation. Millennials and GenZ don't seem to consider it rude, but older generations do.
18-24	If they don't want to engage
25-34	Out of habit and due to feeling unconfident in the situation.

45-54	Habit. Distracted. Fomo
35-44	Everyone does it, it's a bit of a social norm now. There's that joke about being delighted that your friend checked their phone first so you can check yours
35-44	We don't have patience to wait and see messages videos etc later. We are getting used to get all the stuff we want instantly, we don't know how to be patience and wait any more. Also we are not giving a priority to the different things that are happening. Always the person in front of you should be priority number 1
25-34	Habit,They are bored,Some people (men) do it when they want google to provide evidence for a point they are trying to make, like when arguing about something instead of trying to work through it together they turn to wikipedia/google to get a piece of information they think helpful. And often they might think they are being helpful in doing this.
25-34	Habit.
25-34	habit, addicted to knowing what's going on on social media or whatsapp groups
25-34	I reckon people do it subconsciously, like a bad habit.
25-34	Addiction and habit of checking phone
25-34	Smartphone and social media addiction
18-24	Addicted to phones and social media and games
45-54	Are unaware of their behaviour
45-54	FOMO and lack of social graces
25-34	Habit
35-44	Boredom, insecure in their surroundings, or if they're being ignored.
18-24	Our phones have so many features today that are really addictive. If you're bored, you can easily get swept up in what's going on somewhere else in the world. There's always someone to talk to if you are being ignored or a video to watch or a photo to look at.
18-24	I think our phones offer so many ways of communication that it can overwhelm people. As they offer us connection 24/7 it can make you feel that you need to constantly keep in touch with your closest friends all day everyday.
18-24	Boredom, don't want to talk to people, get out of awkward situations.
25-34	It's easy to get distracted by your phone and forget about the real world going on around you.
25-34	Comfort and to feel that people care about what they're doing during the day
35-44	I think a lot of the time it's accidental, like you check one notification and get sucked into your phone for hours without meaning to.
45-54	Feel that they need to keep their social cycle updated on their every activity and move
18-24	Boredom, lack of imagination, not liking being alone with their thoughts or something to prompt them, looking for immediate entertainment, dislike silence
25-34	Boredom, fear of being alone, too much silence. Phubbing keeps your thumbs busy

Responses highlighted in blue mark the participants who consider phubbing bad manners.

Appendix T.

9. Do you think people are aware of phubbing behaviour?

No not at all
No

No
Yes
No
Not always.
Yes. Whether they think it's society acceptable or not is another question.
Probably not, or at least are not aware of just how rude some people can find it.
Yes
No, I don't think so.
Some people, it's definitely generational
Yes
I DON'T THINK THE MAJORITY OF PEOPLE ARE
No
No to our detriment
No
No - at least I hope not.
Yes but it is becoming an acceptable social norm so the act of phubbing is the same as someone making some other excuse to avoid a conversation.
Probably in retrospect but maybe not when they're doing it
I think it has become so normal that people do not think about the emotional implications of it on the people that are in their company, or the effect on them of how they enjoy things in reality and appreciate things as they are happening
Either they are and apologize for it, or they are unconscious of what they are doing, or they don't think is rude
no
Yes
Somewhat
Not always . Habit of looking at phone takes over their action.
Not always
Things like the recent guinness ad bring it out. Definitely someone will point it out if a group of friends are all on their phones at the same time. Other times it's the same as daydreaming
I think phubbing has become quite a common habit for a lot of people. I often find myself getting captivated by something on my phone and losing minutes to it without realising I've been hijacked by my screen. Normally someone will shout at me or use some sort of loud noise or physical touch to gain my attention again!
Yes
Yes, when it's done to them.
Not really. I think people being phubbed are acutely aware but that the tables can turn and those "phubbees" may equally phub others in different circumstances.
No
Yes, more so with the amount of conversation about how much we use our phones - I think there's a collective awareness increasing among users.
No, I don't think so
Yes
some are but don't care
They are more aware if they are the phubbee
Yes.
Yes
No

I reckon a lot fewer are aware than one might expect
Yes, but not the term 'phubbing. I also think people are paradoxically blind to their own acts of phubbing, but hyper-aware of being the phubbee.
No
Some are, I think it depends on the generation. Millennials and GenZ don't seem to consider it rude, but older generations do.
Yes
Yes and no
No
Yes
No
Sometimes.
Surprisingly, I think a lot of people are not aware even if they have been phubbed themselves.
Yes but it's almost accepted as normal sadly
No
Yes
Not aware enough
Yes
No
Yes
No
Yes
I think it's more of an automatic response to any sort of boredom etc. - like a tic
Not really
I think they often aren't
No.
not as much as people should be
Not as aware as they probably should
No
To varying degrees, yes
Yes but it's acceptable now
No
Yes and no
Some are, worst offenders aren't
I don't think we really know we're doing it.
Yes I think so but I think it will take a lot to change it. It's become normal and quite an everyday occurrence. We need to limit when and where we can have and use our phones otherwise we are at risk of losing our relationships or damaging them beyond repair
Yes I think so but I don't think many people know that's it's called phubbing
Yes but try to ignore it as there's loads going on in our phones that we can play with or watch.
I don't think it's done in a malicious way but it's annoying nonetheless.
Yes and no. i think you chose to pick up your phone but it's really easy to get lost in your phone and spend longer than you plan to without meaning to
I think it's easier to spot someone doing it to you rather than catching yourself. I find that I don't realise I'm doing it unless someone points it out to me or makes me aware

Yes but I was not aware of the term
Yes but maybe not what doing it is actually called.
Yes but they still choose to carry it out

Appendix U. Ethics Approval

Re: Ethics A

Sinead Meade

Wed 09/05/2018 14:28

To: Roisin O Flaherty <N00110636@student.iadt.ie>;

Cc: Hannah Barton <Hannah.Barton@iadt.ie>;

Dear Roisin,

Your application for ethical approval for your MSc Cyberpsychology project has been approved by the Department of Technology and Psychology Ethics Committee.

We wish you the very best with your research.

Best wishes,
Sinéad Meade

Assistant Lecturer in Applied Psychology,
Department of Technology & Psychology,
Dun Laoghaire Institute of Art, Design and Technology (IADT),
Kill Avenue,
Dun Laoghaire,
Co. Dublin.

Appendix V.

Ethics A Form

Title of project: Connected by Technology, Empathetically Disconnected:
A Correlational study into Phubbing Behaviour in Ireland

Name of researcher: Roisin O'Flaherty

Email contact: N00110636@student.iadt.ie

Name of supervisor: Liam Challenor

1	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	Yes		
2	Will you tell participants that their participation is voluntary?	Yes		
3	Will you obtain written consent for participation (through a signed or 'ticked' consent form)?	Yes		
4	If the research is observational, will you ask participants for their consent to being observed?			N/A
5	Will you tell participants that they may withdraw from the research at any time and for any reason?	Yes		
6	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	Yes		

7	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	Yes		
8	Will you debrief participants at the end of their participation (i.e., give them a brief explanation of the study)?	Yes		
9	If your study involves people between 16 and 18 years, will you ensure that <u>passive</u> consent is obtained from parents/guardians, with active consent obtained from both the child and their school/organisation?			N/ A
10	If your study involves people under 16 years, will you ensure that <u>active</u> consent is obtained from parents/guardians <u>and</u> that a parent/ guardian or their nominee (such as a teacher) will be present throughout the data collection period?			N/ A
11 *	Does your study involve an external agency (e.g. for recruitment)?			N/ A
12	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort?		No	
13	Does your project involve work with animals?		No	
14	Do you plan to give individual feedback to participants regarding their scores on any task or scale?		No	
15	Does your study examine any sensitive topics (such as, but not limited to, religion, sexuality, alcohol, crime, drugs, mental health, physical health)		No	
16	Is your study designed to change the mental state of participants in any negative way (such as inducing aggression, frustration, etc.)		No	

17	Will your project involve deliberately misleading participants in any way?			No	
18	Do participants fall into any of the following special groups?	People with learning or communication difficulties		No	
		Patients (either inpatient or outpatient)		No	
		People in custody		No	

If you have ticked **No** to any of questions 1 to 11, or **Yes** to any of questions 12 to 18 you should refer to the PSI Code of Professional Ethics and BPS Guidelines and consult with your supervisor without delay. You will need to fill in Ethical Approval Form B and submit it to the Department of Technology and Psychology Ethics Committee (DTPEC) in place of this form.

There is an obligation on the researcher to bring to the attention of the DTPEC any issues with ethical implications not clearly covered by the above checklist.

I consider that this project has **no** significant ethical implications to be brought before the DTPEC. I have read and understood the specific guidelines for completion of Ethics Application Forms. I am familiar with the PSI Code of Professional Ethics and BPS Guidelines (and have discussed them with my supervisor).

* If you are dealing with an external agency, you must submit a letter from that agency with the form A. The letter must provide contact details, and must show that they have agreed for you to carry out your research in their organization.

Appendix W.

Pilot Study Findings

The pilot study was created using Wordpress.com, the Google Forms plugin for Wordpress and Google Forms. The researcher created a number of web pages:

1. **Home** - the home page welcomed participants to the study. The landing page was created to track the number of participants that are introduced to the study as a measure against the number of participants that complete the survey (Unbounce.com, 2019). 100% of participants felt that this was a clear opening to the study as it identified the name of the study.
2. **Information Sheet** - the information sheet explained to participants exactly what they were being asked to agree to participant in.
3. **Consent Form** - the consent form was easily followed and signed by all participants that took part in the pilot study.
4. **Welcome to study page** - There was a slight delay between the consent form and the welcome page. 20% participants said that this slight delay made them think there was an error occurring and did not know if they should continue.
5. **Explainer Video** - All participants said they enjoyed the explainer video. One participant said that it was “a nice introduction, a really welcoming introduction to the study”. Another participant said that it helped them to “get a clear picture what the term phubbing meant” as they had never heard the word before when they read the information sheet.
6. **Demographic questions** - All participants said these were very straight forward and didn’t experience any difficulties answering.
7. **GSP Scale, GBSP Scale** - The researcher experimented with Survey Monkey, Google Forms, Typeform, and Survey Planet to see which platform offered the most versatility and customisation. Following careful considerations, the researcher chose Google forms as the platform as it included Wordpress integration. Although Survey Monkey also offers a wide range of settings, in order to create the survey to include all necessary features,

questions and scales, the pricing was beyond the budget for this research.

The scales were created as likert scales using Google Forms for the pilot study. Participants found the scales easy to follow and complete although 10% of participants commented on the large number of likert scales to complete.

8. **Empathy Scale** - Participants felt that when answering this, they were more inclined to say they were empathetic as they knew the researcher was in the room with them. 40% of participants said that if they had been at home or on their own answering this, they possibly would have answered differently. For the actual study, participants will be free to complete the online survey in their own time and in a location of their choice. The researcher hopes that this will allow participants to be as honest as possible.
9. **Debrief** - 100% of participants considered the debrief appropriate and easy to follow.

Following the pilot study, a number of conclusions were reached:

- 1) Although Google Forms does not have the same level of customisation and versatility as Survey Monkey, the pricing required to access Survey Monkey was over budget for this study.
- 2) The Wordpress Google Forms plugin did not allow complete Google Forms to be integrated into the site. As a result, the researcher needed to integrate separate forms for the consent form, demographics, GSP, GBSP, and SITES. This meant that it was difficult to identify which participant's responses were links to which and the consent associated with each participant. In order to overcome this, the researcher decided that rather than using Wordpress, it was necessary to create the entire survey within Google Forms.

Appendix X. Normality of Scales

